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WIRE LINE CORE DRILL

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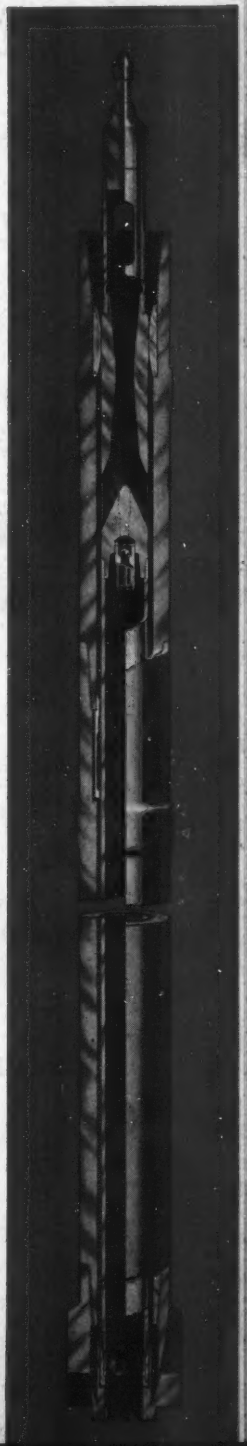

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Vol. 32
No. 15
Whole
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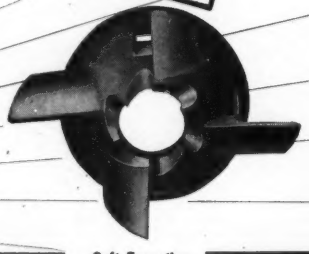

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CALIFORNIA
OIL WORLD
and Petroleum Industry

THE AUTHORITY ON THE CALIFORNIA OIL INDUSTRY

FIRST ISSUE
AUGUST 1939
VOL. 32 » NO. 15
WHOLE NO. 1542

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August 9, 1939

Telephone Number Richmond 2136

Through San Joaquin Valley Wildcat Areas

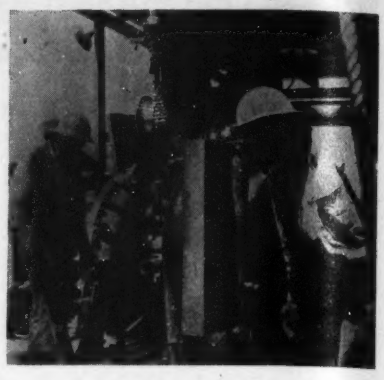
With The Cameraman — Part Two

As we prepare to complete the second leg of our camera trip through the San Joaquin Valley's newer oil fields, we find some "unfinished business" at hand and revert for a moment to certain items discussed at length in Part One of this illustrated recital. We left Bandini Petroleum Co.'s 48-18 in Section 18, 19-16, coring the Glauconitic green sand at 7461 feet. Last reports at this writing are given by our Coalinga Scout as follows:

Bandini Petroleum Co's well No. 48-18, sec. 18, 19-16, one half mile west of production in the Coalinga Northeast Area, encountered the Gatchell oil sand after nearly all hope had been abandoned. Due to the tremendous thickening of the Turritella Silt replacement in the zone, much doubt had previously existed concerning the success of the venture. The quantity of the sand is reported to be as good as any portion of the sand produced at present.

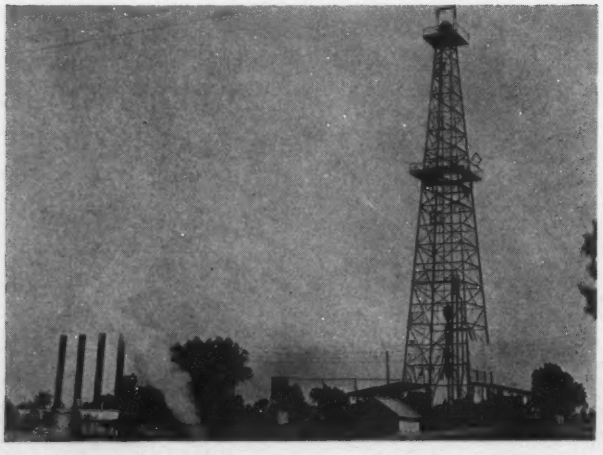
Top of the sand was given as approximately 7960 ft., which is 324 ft. higher than in Amerada's recently completed SPL No. 26-17. Basing the presumption upon known facts concerning the area, the well will probably have about 250 ft. of producable zone. Consistent with the thinning to the west of the Gatchell Zone in the Eocene Pool, the expectation is that the drill will find basal siltstone underlying the oil sands, instead of the water sands present under the discovery area. Bottom of the hole was last reported in oil sand at 8015 ft.

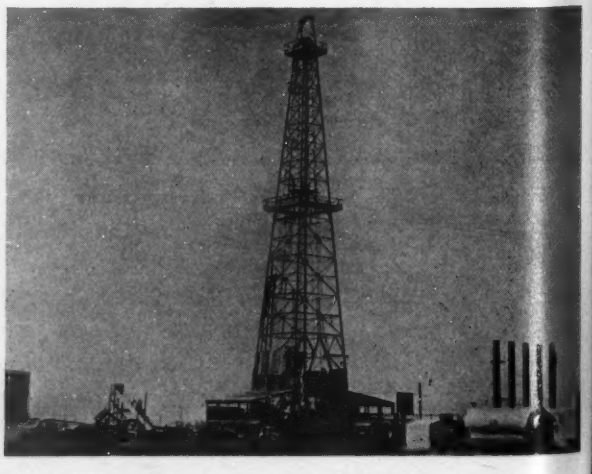
This wildcat is little more than half a mile west of Amerada Petroleum Co.'s 26-17, in the Coalinga-Northeast Area, which was completed July 30, flowing at a 3190 barrels a day rate of 27° gravity oil cutting



Union 61-34, Rio Bravo

Tide Water Associated No. 81, Coles Levee.





Tide Water Associated E-24-7, left, and No. 81, right, in Strand Area of Coles Levee.

0.2 per cent through 9/64 inch and 11/64 inch beans, and 2400 mcf. of gas.

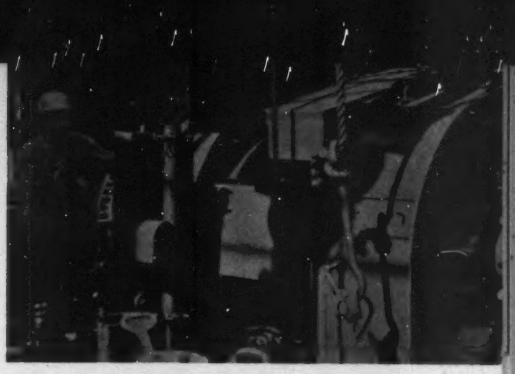
In the Grapevine-Wheeler Ridge Area Richfield is cleaning out at 10,777 feet at its KCL No. 1, which was plugged back from the 11,004 feet depth reported in Part One. In the N.W.-Greeley Area, where General Petroleum Corp. is seeking to extend the Greeley field to a point midway to Rio Bravo field, the corporation's Sullivan No. 1 is now down to 8249 feet in sand and shale. The Greeley sand was not cored. In the San Emigdio Area, where Shell is set up to make as deep a test as the indications warrant, Shell's KCL 2A-52-13 is in silty sand at 9384 feet. In the Wasco - Semitropic Area George F. Getty's Janssen No. 1 is in hard shale at 12,584 feet. Holly Development in the East Coalinga is idle at 6686 feet at its No. 82-12C. Superior Oil Co.'s Fink No. 1, in Rio Bravo field, is last reported with a 315 barrels a day flow of 39.1° gravity oil cutting 0.2 per cent through a 10/64 inch bean with pressures 1780/2100 pounds. Gas production is reported at 335 mcf. a day.

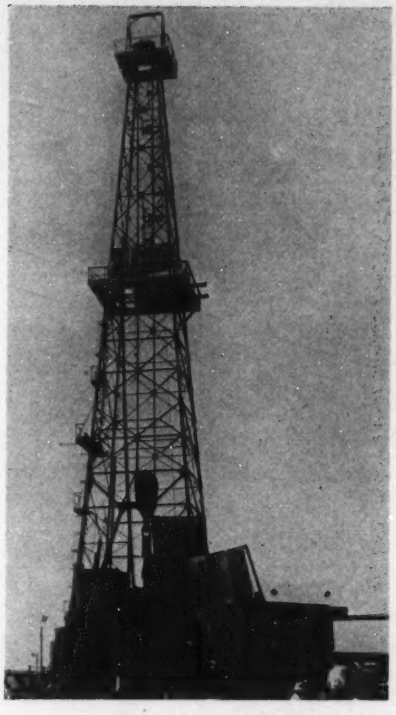
On page 22 of the Second Issue July of the California Oil World appears a map showing the locations in the Valley of most of the wildcats and semi-wildcats discussed here. Since the taking of the views shown here of Standard's KCL No. 12-6, near the center of Section 30, 29-26, and southwest of No. 12-1 which has been considered an edge well with little oil production from 7886 feet, No. 12-6 has been completed. The potential flow from 11,942 feet was indicated at 4212 barrels daily of 38.9° gravity oil through a 16/64 inch tube bean and a 48/64 inch casing bean. The cut was 6.9 per cent fresh water, and gas production 2000 mcf.

Tide Water Associated Oil Co.'s Cont. KCL No. E-35-7, near the center of Section 7, 30-26, has been completed with a flow of 1306 barrels daily of 34° gravity oil. The company's nearby No. E-24-7 is in sand and shale at 7688 feet, nearing the oil sand topped at 8310 feet in the discovery well of the Strand Area.

Standard's KCL No. 21-1, north of Richfield-Western Area in Section 19, 30-25, was last reported to have recovered oily mud on formation test with bottom at 9900 feet and is preparing to deepen. A test of the interval 9170-9850 feet recovered 4600 feet of oily mud and a little 29° gravity oil. In the Coles Levee Area in Section 9, 31-25, is Standard's KCL 20-1, now known as the "gasoline well." This well came in flowing 2175 barrels daily of 53.5° gravity oil with 35,400,000 feet of gas. On a test, flowing through a 2/64 inch bean, production was 114 barrels a day of 66.8° gravity oil with 2,347,000 feet of gas. In this area, in Section 11, Ohio Oil Co.'s No. F-3, whose name has been changed to No. 43-11, was completed July 31 with an initial production of 458 barrels daily of 39° gravity oil cutting 0.4 per cent through a 24-64 inch bean. Gas production was estimated at 445 mcf. The oil sand was topped at 9525 feet, and total depth is 9611 feet.

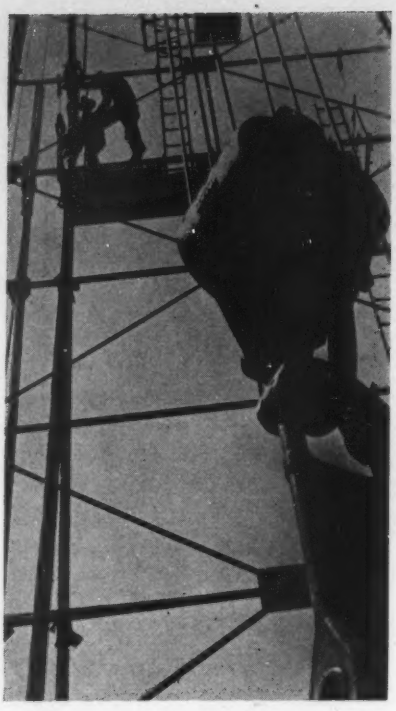
Richfield Oil Corp.'s Second B-14-3, in Section 3, 31-25, is in hard shale and oil sand which was topped at 9342 feet. Latest depth reported was 9452 feet. Seeking the sand

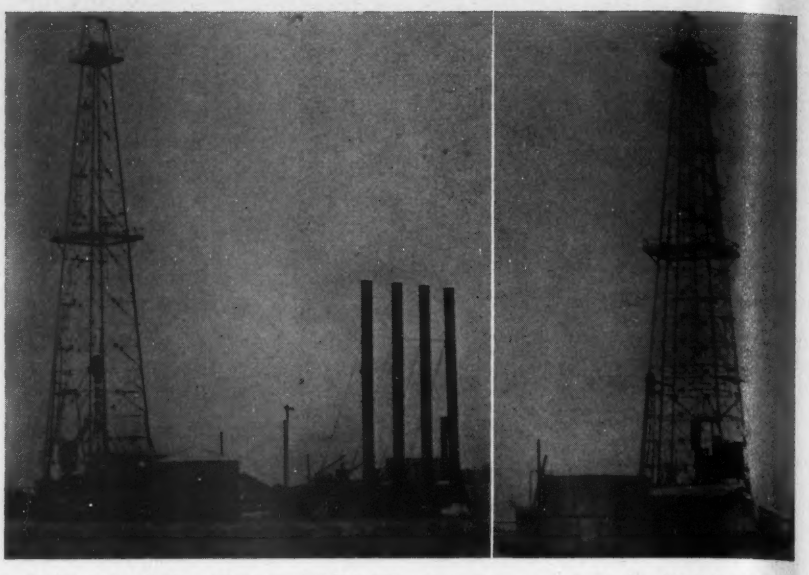




Standard 12-6 in Greeley Area. Above, drilling ahead on No. 12-6.

Straightening drill pipe at Standard's No. 21-1, Richfield Western Area.





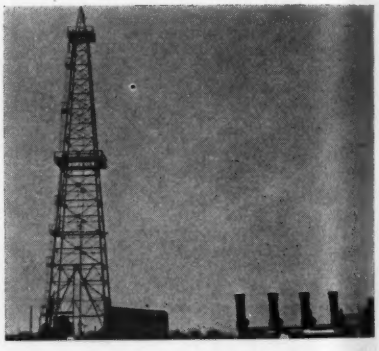
Left, Standard No. 21-1, Richfield Western Area, and, right, Richfield 2nd B-14-3, Coles Levee.

topped at 9932 feet in No. 61, Tide Water Associated Oil Co. is in sand and shale at 6801 feet in its KCL No. 81, Section 14, 31-25. Union Oil Co. in Section 11, 31-25, is standing cemented at 9947 feet after drilling brown shale streaked with oil sand, in its Kernco 52-11.

In the Greeley Area, Standard Oil Co. is drilling in hard brown shale at 11,260 feet in its KCL No. 11-18, Section 17, 29-26.

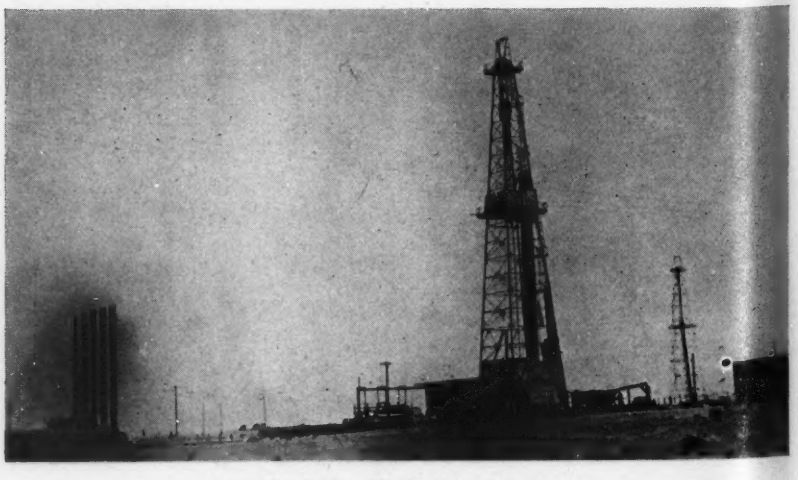
Universal Consolidated Oil Co.'s No. 2 (Derby) has been completed since the first leg of this trip through the Valley fields with the camera. The well was completed flowing 2880 barrels daily of 30° gravity oil.

Located near the west line of Section 15, 31-29, the well is producing from sands topped at 5880 feet. A half mile south in the northwest cor-

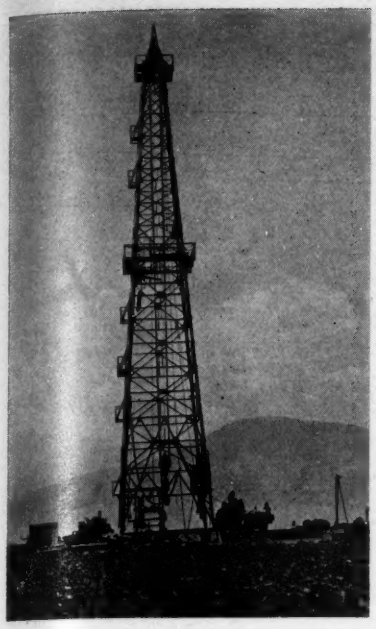


Standard No. 20-1, Coles Levee.

Above, a little high life on Tide Water's No. 81, Below, Tide Water's Strand discovery well.



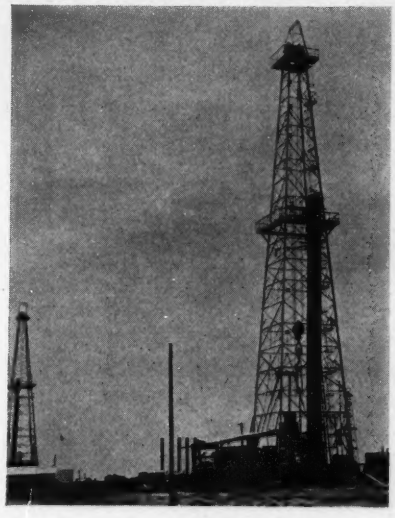
Standard No. 11-18, Greeley Area.



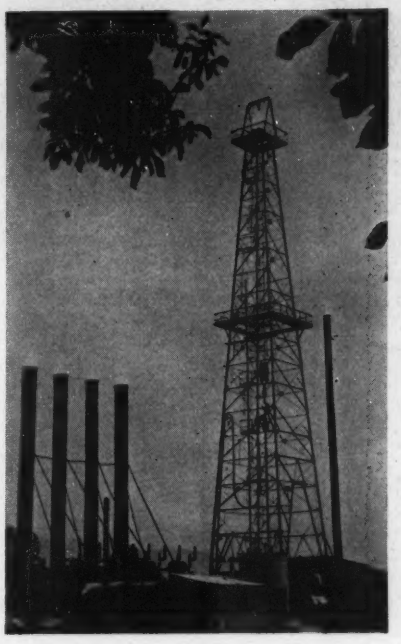
Universal Consolidated's No. 2, Mountain View—South.

ner of Section 22, Standard's Tupman No. 1 is drilling at 6744 feet in shale after finding a streak of oil sand at 6595 feet. In the background of the picture showing Standard's No. 2-4, is Superior Oil Co.'s Jewett No. 1, located just south of the discovery well. Superior's well was last reported standing idle after re-running liner in an effort to avoid water intrusion. This well was completed originally for 784 barrels a day of 30° gravity oil cutting 10 per cent, the well produced for some time with increasing cut until the water was 30 per cent of the fluid yield. After re-running liner and tubing, the well refused to flow on gas lift and was suspended July 16.

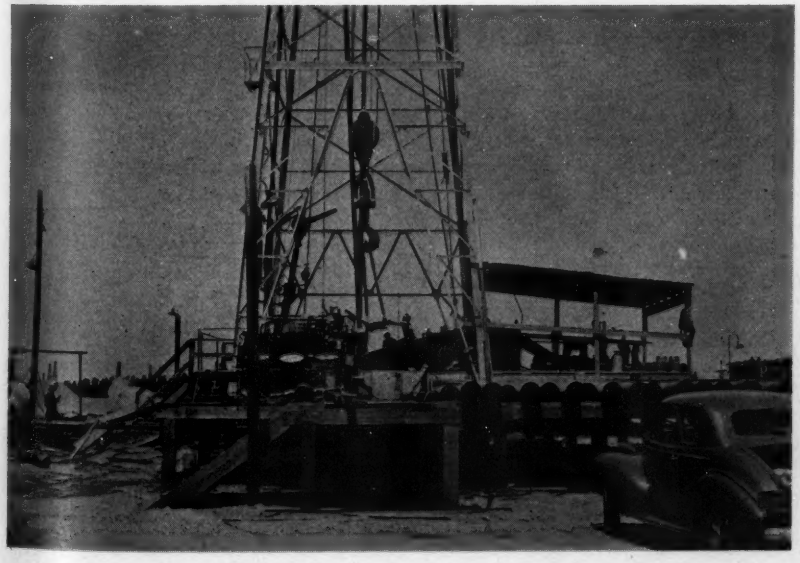
Richfield Oil Corp.'s Mott No. 1, Section 9, 31-29, was last reported drilling in sand and shale at 5786 feet. This is an offset to The Texas Co.'s producer, Jewett No. 1. Standard's Jewett 2-4, was completed July 31, at a depth of 6110 feet, with an initial production of 1340 barrels of 29.8° gravity oil cutting 3 per cent through a 1 inch casing bean and two 96/64 inch tubing beans. Gas flow was estimated at 3765 mcf. a day.



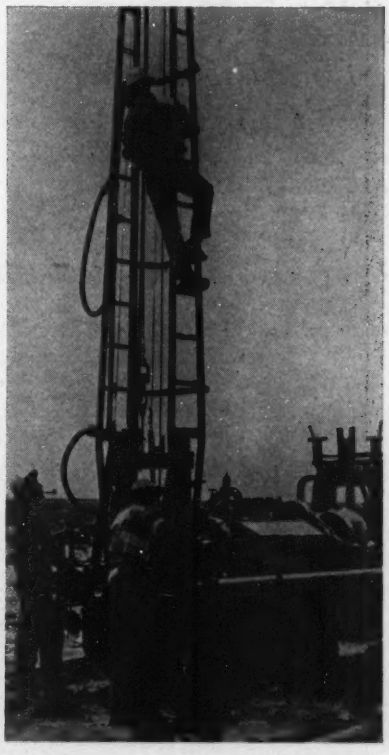
Foreground, Standard's No. 2-4; background, Superior Jewett No. 1, Mountain View—South.



Standard Tupman No. 1, Mountain View-South.



Richfield's Mott No. 1, Mountain View—South.



Geophysical (seismograph) crew sounding out the Mountain View Area.

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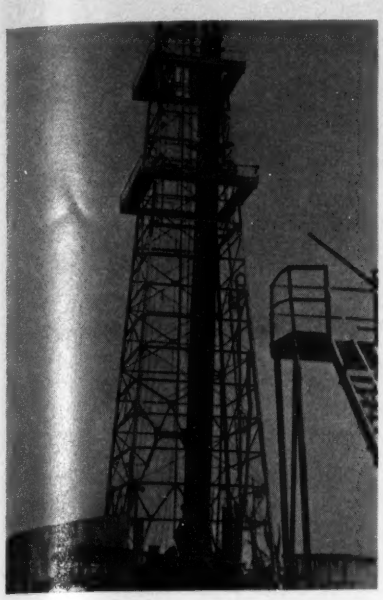
another ASSOCIATED service

Union Oil Co. is drilling in oil sand at 11,365 feet in its Kernco No. 61-34, in Section 34, 28-25. Top of the Rio Bravo pay was found at 11,228 feet.



Union 52-11, Coles Levee.

Cliff Robinson Dies July 31 in Mosul, Iraq

Word of the death in Mosul, Iraq, of Cliff Robinson, of 212 West Brookdale Place, Fullerton, from heart failure following an operation, was received by telegram and cable as of July 31, by members of the family.

Mr. Robinson, an oil driller for the British Oil Development Company in Iraq, left Fullerton for his work there nine months ago. He is a veteran of the Southern California oil fields and well known throughout the Fullerton district.

J. Roy Hoffman Elected L. A. Chairman of A.S.M.E.

The Los Angeles Section of the American Society of Mechanical Engineers at their recent annual election of officers named J. Roy Hoffman, vice president and treasurer of Smith-Booth-Usher Co., chairman; C. H. Smith, engineer for C. F. Braun & Co., was elected vice chairman, and E. Kent Springer, sales engineer for Fluid Packed Pump Co., secretary-treasurer. Paul Armstrong, J. Calvin Brown, and John A. Whitaker, were new members appointed to the executive committee.

Associated with Smith-Booth-Usher for more than 25 years, Mr. Hoffman is widely known in the California oil industry. He has been active in the California Natural Gasoline Association of which he is a director. Mr. Hoffman received his engineering training at Stanford University and has been active in the American Society of Mechanical Engineers for more than 15 years.

ERRATUM

On page 17, second column, second line, in the Second Issue, July, a typographical error gave ridiculous effect to a description of heat exchanger efficiency in Richfield's new cold acid treating plant. The use of heat exchangers brings the temperature of the treated distillate to within about 7°F. of the raw feed temperature—not 70°F.

A.I.M.M.E. Announces Mid-Summer Dig Date

The American Institute of Mining and Metallurgical Engineers will enjoy another annual picnic, "The Mid-Summer Dig," Saturday afternoon, Aug. 19 at the Uplifters Club in Santa Monica.

Tommy Atkinson, chairman of the picnic committee, promises a surpassing program of entertainment and a barbecue steak supper.

This outing joins all petroleum and mining engineers on the West Coast in the big celebration of the year and is looked forward to with genuine pleasure.

H. W. Sanders Appointed Union Oil Co. Treasurer

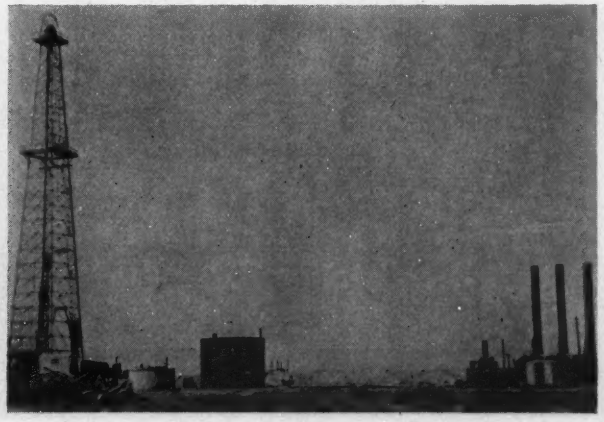
Reese H. Taylor, president of Union Oil Co. of California, has announced the election, effective Aug. 1, of H. W. Sanders as treasurer, succeeding J. M. Rust, retired.

California Standard Receives All Saudi Arabia Oil Rights

Vigorously sought by Japanese, German and Italian interests, the entire concession for oil throughout the Kingdom of Saudi Arabia has been granted to an American company, the Standard Oil Co. of California, according to dispatches from Bierut, Syria. Until the latest reported arrangement, Standard of California pioneered oil exploration and exploitation in Saudi, receiving large acreage lease rights.

King Ibn Saud, who granted the concession, is reported to have received approximately $1,500,000 in cash, and is to receive $775,000 annually while the prospecting is going on and as soon as oil production begins in any part of the concession area he is to receive royalties which will increase with production.

It is reported that while interests of other nations offered considerably more for even a third of the concession granted to Standard of California, King Saud preferred to deal with an American company.



Above and right, Ohio's 43-11, Coles Levee.

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SPERRY-SUN SURVEYING Instruments
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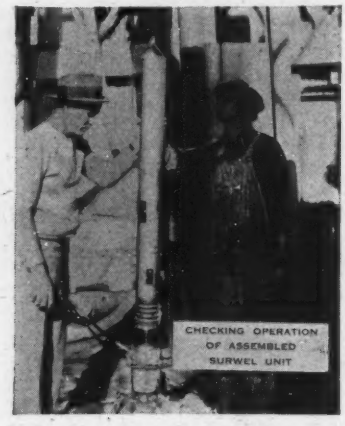
GYROSCOPIC MULTISHOT INSTRUMENT



Most accurate and reliable Multishot Well Surveying Instrument. Automatically operated, eliminating human errors. Makes two surveys at greatest speed—one going into and one coming out of the hole—double-checking inclination and direction.

Saves rig time. Wells of 10,000 Ft. depth can be double surveyed in two and a half hours on the wire line, and in about five hours on the drill pipe.

SURWEL service is given by our experienced service engineers. Write for Price List No. 26.

Patented and applications pending.

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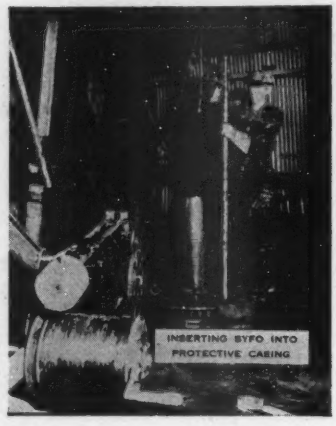

Records speedily and accurately on paper, directly readable, and suitable for filing, the inclination of a bore hole. Is dropped as a "Go-Devil" inside the drill pipe in deeper wells. Requires about twelve minutes to reach 11,000 Ft. depth, and two more minutes to make the record. The least expensive, simplest to operate, and most reliable inclinometer.

Annual rental costs considerably less than it costs to operate an acid bottle.

Patented.

Self-Checking

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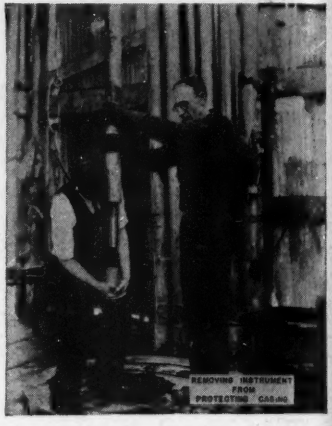


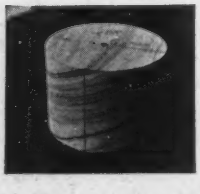
The only Single Shot using a Floating Compass and a triangularly Suspended Crosshair—both capable of withstanding the severe treatment when being lowered into the open hole or "Go-Deviled" through the drill pipe and landing outside the bit in place of a removable core barrel.

Has record of being used over five months without repairs or replacement on several wells of over 7,000 Ft. depth.

Reasonable in operating cost — rented on a daily basis.

Patented and applications pending.

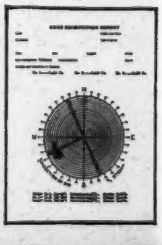
Self-Checking **POLAR CORE ORIENTATION** *Service*



Orientation of cores is made **without loss of rig time.** Residual polarity is automatically recorded with the greatest sensitivity and accuracy, in our laboratory, to which core samples are shipped.

Old cores as well as cores from distant foreign countries have been successfully oriented. Write for Price List No. 28.

Patented and applications pending.



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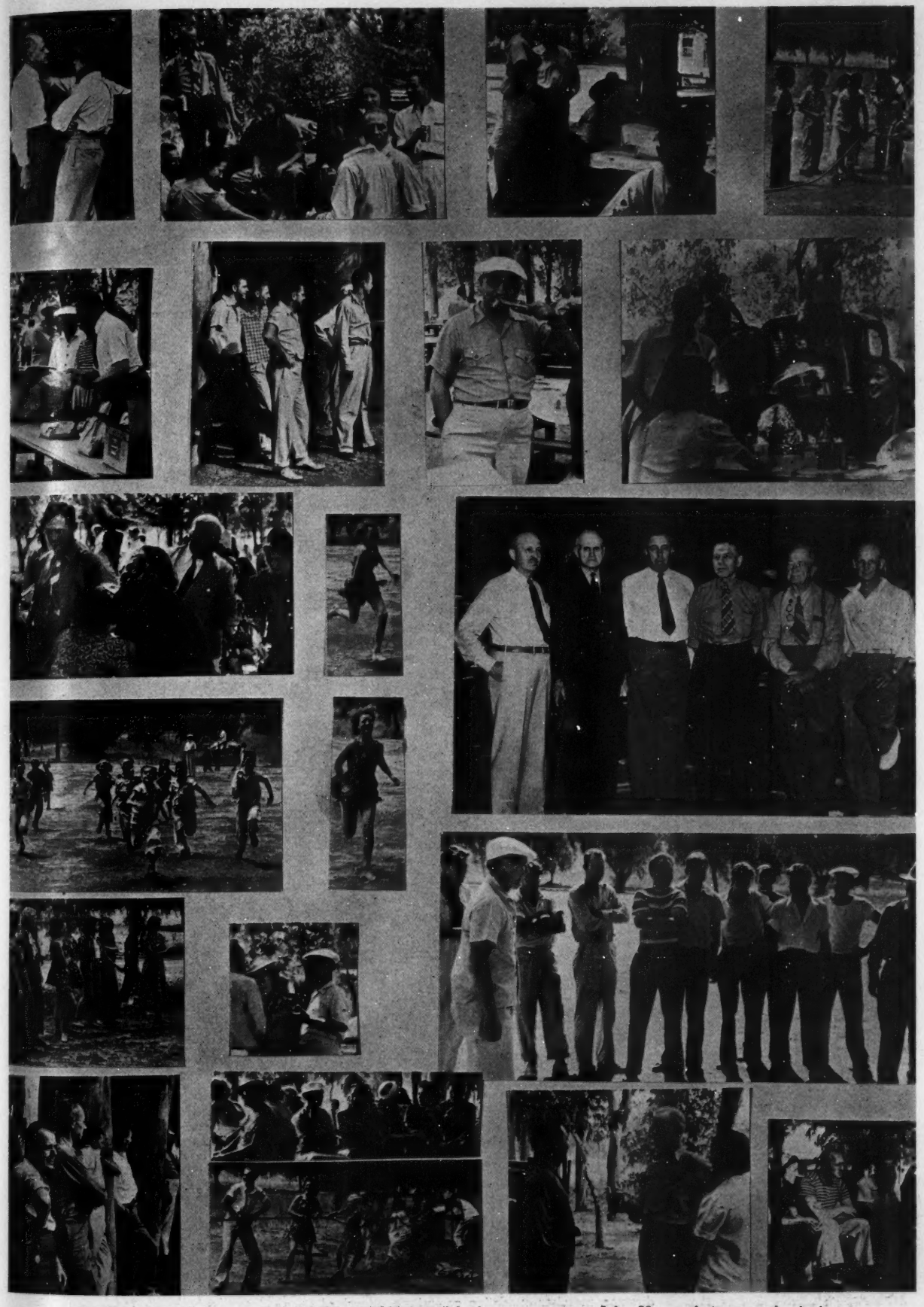

Oil Well Supply Co. present and future "Oldtimers" had a great time, July 29, at their annual picnic.

Electrical Controls, Fractional Horse Power

Motors in Natural Gasoline Plant Operation

By H. C. Hill*

In order to cover this subject properly, I felt it advisable, not only to cover controls and motors, but also wiring and other electrical devices as used in absorption plants and refineries.

The petroleum industry, prior to 1921 in this area, did not pay much attention to wiring and equipment as compared to that used in 1939. Very little in the way of a definite planned program of explosion-proof wiring had been accomplished before the issuance of the National Electrical Code rules of No. 1932 edition. The safety program for the protection of life and property demands this type of wiring and equipment. We must realize that the electrical industry is comparatively new and growing very rapidly, and regulations and rules are essential, and are being formulated and changed continually.

In order to understand the requirements of electrical equipment in refineries and absorption plants, it is necessary to understand the rules as published by the State of California. I will cover the subject of rules and apparatus to prevent sparks causing fires and explosions.

The State of California has issued a set of rules, "Electrical Safety Orders of the Industrial Accident Commission." These rules were revised in 1934, and at that time a group representing the electricians and engineers from the various oil companies and men from the manufacturing concerns, were asked for their recommendations on the section pertaining to hazardous locations.

After two rather lengthy sessions, these suggestions were prepared and adopted by the Industrial Accident Commission almost verbatum. Subsequently they were approved at the two public hearings at the time the entire code was adopted. The State engineers appreciated very much the cooperation and assistance given by the oil company representatives in the formulation of these rules. The California Code is similar to National Board of Fire Underwriters Code, but is much more strict in certain cases. The Cities of Los Angeles, Long Beach, and Torrance have supplementary rules which must be watched, for they differ slightly from the California rules.

What are hazardous locations? They are divided into two primary classes, namely:

Class 1-A locations are those enclosures in which flammable volatile liquids, highly flammable gases, mixtures, or other highly flammable substances, are manufactured, used, or handled in open containers, or are stored in such a way that a hazardous condition may continually or frequently exist in the atmosphere. Example: Dry-cleaning plants, varnish and paint rooms, gas plants, and rooms where highly flammable liquids are handled or stored in open containers.

Class 1-B same as Class 1-A except that flammable materials are so handled

*Sales Engineer, General Electric Co. Los Angeles.
Presented at the California Natural Gasoline Association July Meeting.

Annual Meeting of Directors of California Natural Gasoline Association, Jonathan Club, July, 1939. Left to right—far side of table—M. J. Binckley, Taft Chapter, with So. Calif. Gas Co.; B. D. Balthis, member executive committee, Mgr. Natural Gas Equipment, Inc; O. C. Field, director, O. C. Field Gasoline Corp.; W. D. Smith, director, Wilshire Oil Co.; J. C. Burks, director, member executive committee, O. C. Field Gasoline Corp.; L. M. Windle, director, Richfield Oil Corp., chairman audit committee: W. A. Kirk, director, member executive committee, Calif. Southern Oil Co.; R. C. Wheeler, director, member executive committee, General Pet. Corp; C. D. Gard, director, member executive committee, and W. W. Robinson, Jr., director, chairman technical committee. Left to right, table along fireplace wall—S. F. Magor, director, Superior Oil Co.; A. H. Bell, director, Continental Oil Co.; Harry Fiske, director, chairman entertainment committee; Gordon Greene, chairman membership committee, Robinson Orifice Fitting Co.; H. R. Linhoff, director, member executive committee, Richfield Oil Corp.; P. S. Magruder, president, General Petroleum Corp., and L. V. Cassaday, vice-president, Lomita Gasoline Corp. Left to right—near side of table—H. L. Eggleston, director, member executive committee, Gilmore-Dabney, Inc.; F. A. E. Lowell, director, Del Rey Oil & Gas Co.; W. E. Helmick, Shell Oil Co., Inc.; F. E. Davie, director, Shell Oil Co., Inc.; W. C. Dayhuff, chairman, program committee, Standard Oil Co.; R. D. Gibbs, director, member executive committee, Union Oil Co.; J. S. Fluor, Jr., director, member executive committee, Fluor Corp.; R. W. Heath, director, member executive committee, Signal Oil & Gas Co.; F. J. Colton, director, member executive committee, Tide Water Assoc. Oil Co., and G. C. McLaren, director, member executive committee, Standard Oil Co.

California Natural Gasoline Association Standing Committees Chairmen: Standing—left to right—W. W. Robinson, Jr., chairman, technical committee, The Texas Co.; L. V. Cassaday, chairman advisory committee, Lomita Gasoline Corp.; Harry Fiske, chairman entertainment committee, Ingersoll-Rand Co.; George L. Tyler, secretary-treasurer, and John H. Kunkel, chairman publicity committee, John H. Kunkel Advertising Agency. Seated—left to right—W. C. Dayhuff, chairman, program committee. Standard Oil Co.; L. M. Windle, chairman, auditing committee, Richfield Oil Corp., R. D. Gibbs, chairman, gas report committee, Union Oil Co., and Gordon Greene, chairman, membership committee, Robinson Orifice Fitting Co.

so as to normally prevent escape and accumulation of flammable gases and substances. Example: Producing oil wells where large amounts of gas occur, and all drilling wells within an area 25 ft. from the casing.

In the case of Class 1-A or 1-B, "enclosures are those places which are roofed, or at least have three walls, and open sumps or pits into which highly volatile liquids are run, or areas surrounded by buildings or fire walls where liquids are run, or areas surrounded by buildings, or fire walls where explosive vapors can accumulate. Large, well-ventilated rooms are considered a hazardous area within a distance of 20 feet from the source of infrequent hazards, such as pumps, compressors, valves, etc. where leaks may occur.

Class 1, Group D locations. The N. E.C. defines these as atmospheres containing gasoline, petroleum, naphtha, alcohol, acetone, lacquer solvent vapors, and natural gas. Early in the development of apparatus for Class 1 Group D locations, it was found that it was practically an impossibility to construct apparatus which was vapor-tight—that is, so constructed that vapor would not enter the enclosing case. The alternate heating and cooling of the air within the enclosure, such as switch cases, conduit system, motor frame, and the like, result in an unbalancing of pressure to such an extent that the vapor or gas is forced through even in a remote minute opening. This phenomenon is usually referred to as breathing. Assuming that the vapor or gas will enter the conduit or other parts of the enclosing system, it can be expected that the mixture of vapor or gas and air within, will explode. With this in mind, it is apparent that conduit joints, fittings, motor and control cases, and other enclosures, must be so designed as to prevent the emission of the flame or hot gases, as all have to withstand the pressure developed within the enclosing system in the event of such explosion. Should flame or hot gases be permitted to issue from the enclosure, it is clear that any explosive mixture surrounding it would be ignited. It is desired to avoid this and it represents the standard to which Class 1 apparatus is constructed. Hence, in the various rules for Class 1 locations, we find the term "explosion-proof" used, which is defined as follows:

> "Explosion-proof means enclosed in a case which is designed and constructed to withstand an explosion of a specified gas or dust which may occur within it, and to prevent the ignition of the specified gas or dust surrounding the enclosure, by sparks, flashes or explosions of the specified gas or dust which may occur within the enclosure."

Certain rules have been established by the laboratories governing the manufacture of equipment for use in hazardous locations. In general, these rules prescribe minimums of strength of the enclosure and its fastenings to resist the explosion pressure and, second, that joints, operating shaft openings and fastening openings be of such design as to prevent the emission of flame or hot gases.

After any device has been constructed along the lines above mentioned, it can be sent to the Underwriters' Laboratories for test, and if it successfully passes these tests, it can be so listed.

The following pertains to the California Code.

Service Equipment

In Class 1-A locations, switchboards, services, panel boards, etc., must be explosion-proof.

Class 1-B switchboards, etc. must be vapor-tight, or have all arcing and sparking parts oil-immersed. The same rules apply for over-current protective devices. It is recommended that all such equipment be put outside the hazardous area wherever possible, for such equipment must be serviced, and often when shut down, and that is impossible without risk. Usually money can be saved by installing these outside the area.

Motors and Generators

For Class 1-A locations, motors and generators shall be totally-enclosed explosion-proof types, or totally-enclosed externally-pipe-ventilated type, with external ventilation from a safe source of ventilating air.

For Class 1-B locations, motors or generators shall be of the types permitted for Class 1-A or a type having no contacts, commutators, or sparking parts, or of the totally-enclosed type.

Control

For Class 1-A locations, motor controllers, thermal cutouts, switches, relays, etc., which normally tend to create arcs, sparks, or high temperatures, shall be of the type approved for explosive atmospheres.

For Class 1-B locations, such control devices may be installed in vapor-tight enclosures or have all sparking or high temperature parts immersed in oil. If practical, such installations shall be installed outside the hazardous area.

Conduit

In Class 1-A locations, only rigid metal conduit with explosion-proof joints and fittings shall be employed as the type of wiring. When it is necessary to employ flexible connections as in motor terminals, an approved flexible fitting of explosion-proof type shall be used. The sealing-off of conduit is very important. Seals are required wherever a conduit system enters or leaves a hazardous area into a non-hazardous area, and at points where conduits terminate in an enclosure in which arcing or sparking is likely to occur, such as at motor terminals, switch boxes, and the like. This sealing must be of a thickness not less than ⅝-inch and the compound used must have a melting point of not less than 200 deg. F.

Joints in approved rigid conduit made with approved threaded couplings, having five full threads engaged, are recognized as being explosion-proof.

In Class 1-B locations, only rigid metal conduit with full threaded fittings shall be employed, and the rules are practically the same as for Class 1-A except that a flexible metallic conduit can be used for short lengths as at motor terminals.

Light Control Switches

For Class 1-A locations switches controlling lighting circuits shall be of the type approved for use in explosive atmospheres.

For Class 1-B locations, lighting switches shall be of a type having all sparking or arc making contacts enclosed. The vapor-tight enclosure shall have contacts immersed in oil.

Lamps and Receptacles

For Class 1-A and Class 1-B locations, lamps in a fixed position shall be installed in fixtures of the enclosed vapor-tight type, and shall be properly protected by substantial metal guards or other approved means where exposed to breakage.

The N.E.C. call for explosion-proof type.

In explanation of these special devices consider lighting fixtures as a typical example. The vapor-tight lighting fixture with which you are all familiar, is no longer permitted for hazardous locations because of the fact that it usually operates at a temperature in excess of the ignition temperature of the hazardous gases; would blow up if gas was ignited within the globe, and would therefore be a distinct hazard. This type of fixture still has its place in industry and should be recommended where water vapors are present or corrosive fumes, or where mechanical protection against possible injury to the fixture is desired.

The explosion-proof fixture for Class 1 locations is of much heavier construction; all joints between parts are flame-tight. The assembly will stand an explosion of the cubical contents of gas without breaking. The operating temperature of the assembly is lower than the usual vapor-tight unit of the same wattage, and below the ignition temperature of the gas-air mixture for which it is designed.

Portable Lamps and Cords

When it is necessary to use portable lamps or other portable current-consuming devices in either Class 1-A or Class 1-B locations, approved flexible cord designed for hard usage, such as Type S or Type PA, shall be used, and the flexible cord shall contain one extra insulated conductor which shall be properly connected to form a grounding connection for metal lamp guard, motor frames, and all other exposed metal portions of such portable lamps and devices.

Receptacles and Attachment Plugs

For Class 1-A locations, receptacles and attachment plugs, if used, shall be so connected as to be a part of unit device with an explosion-proof interlocking switch so that the plug cannot be removed while the switch is in the "on" position. Such receptacles and plugs shall be of the polarized type—providing a connection for the grounding wire of the portable cord. It is recommended that wherever possible, such receptacles and attachment plugs be installed outside of the hazardous area.

Motors, Frames, Controls, Etc.

Grounding is very essential, and the Code is very particular with respect to

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the method with which this grounding is accomplished.

Signaling Devices

Telephones and other signaling devices, and electrically operated measurement and control equipment in which there are arcing or sparking contacts, when installed in Class 1-A locations shall have such arcing or sparking parts enclosed in specially constructed explosion-proof or vapor-tight enclosures. Wherever possible, such devices should be installed in non-hazardous locations.

Undoubtedly, you have been confronted many times with the problem "What should I do" on a certain installation. Either your electrical engineer or electrician who is familiar with the Code can help you. Officially, the local, State, or County inspector is always willing and anxious to help you. It is far better to see them before, and not after, you have put in your installation.

In some cases, your requirements are for equipment which is not listed by the Underwriters, and it is essential, therefore, that you obtain a waiver or approval from the inspector.

The manufacturers have not been entirely asleep on this problem, and today it is possible for you to obtain motors and controls, pushbuttons, conduit fittings, signal devices, lights, indicating lamps, telephones, etc., which have been approved by the Underwriters for use in hazardous areas.

Fractional HP Motors

These are obtainable in Class 1, Group D construction, in sizes from 1/20 hp, 4 pole, to and including ¾ hp, 4 pole, a-c and d-c. They are continuous rated and have no brushes. The gasoline pump motor used in service stations is ⅓ hp, ½ hour, and can be rated ¼ hp continuous if frequently oiled.

The smallest 3 phase, 440 volt, is 1/6 hp.

For fan drives, two types are available: KH (split phase) low torque, and KC (capacitor type) high torque.

The KH is made up to ¼ hp, and the KC ¼ hp and up.

For pump drives, only the KC high torque is recommended, because of the likelihood of tight stuffing boxes and cold oil starting.

Laboratories

Due to the use of Bunsen burners in laboratories, most people believe it unnecessary to have explosion-proof equipment provided blowers are used to force clean air into the room.

Others have two rooms without a door between, and put hazardous equipment in separate room.

Heaters can be obtained for black heat, say 300 to 350 deg. F. with thermostat.

Centrifuges can be obtained with explosion-proof motors.

The Industrial Accident Commission would welcome a recommendation from this organization on this subject.

One thing I cannot understand is why, in absorption plants, most people insist on explosion-proof switches, lights, cords, telephones, conduit fixtures, etc., and yet use open-type magnetos, high tension leads and D-C starters and batteries, which can easily cause sparks and fires. They do not even lag or protect the exhaust manifolds and pipes. It seems to me that these things should be corrected, and proper rules and regulations established by the State Industrial Accident Commission to cover them.

If the operators do not feel that this is essential, then why spend extra money on explosion-proof motors, controls, wiring, etc. in your absorption plant.

One of the reasons why we rarely hear of anyone leaving the oil business for another vocation is readily evident at meetings of oil men. We quickly learn where we stand in this industry, where men are friendly, sincere, and withal prompt with constructive criticism. We are deeply appreciative when some service of ours merits such notice as indicated in the following letter to the editor:

"You will be pleased to learn that the Board of Directors of the California Natural Gasoline Association have just passed a resolution expressing their sincere appreciation for the very fine cooperation which has been extended by California Oil World.

"I am sure that the personal view of the Board expresses the feeling of the entire membership of the Association.

"Please be assured that the Board of Directors are always available to extend any cooperation they can to you personally, as well as to the publication.

"Cordially yours,
(Signed) P. S. Magruder
President."

C.N.G.A. Officials Hold Annual Meeting

As dinner guests of the General Petroleum Corp., the directors, officers and committee chairmen of the California Natural Gasoline Association attended the organization's Annual Joint Directors and Executives Committee Meeting recently at the Jonathan Club, Los Angeles, to install new officers and formulate plans for the group's activities during the coming 1939-1940 season.

The meeting was called to order by H. R. Linhoff, retiring president, who thanked the membership, committeemen, officers and directors for the support his administration received and then turned the gavel over to P. S. Magruder, newly elected president, who presided over the balance of the meeting. In accepting the gavel from Mr. Linhoff, Mr. Magruder paid high tribute to Mr. Linhoff for the accomplishments and association progress attained under his presidency.

Those attending the meeting were: M. J. Binckley, Taft California Chapter chairman; B. D. Balthis, executive committee; O. C. Field, director; W. D. Smith, director; J. C. Burks, director; L. M. Windle, director; W. A. Kirk,

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director; R. C. Wheeler, director; C. D. Gard, director; W. W. Robinson, director and chairman of the technical committee; S. F. Magor, director; A. H. Bell, director; Harry Fiske, director and chairman of the entertainment committee; Gordon Greene, chairman, membership committee; H. R. Linhoff, retiring president, director; P. S. Magruder, new president; L. V. Cassaday, new vice-president; George L. Tyler, secretary-treasurer; John H. Kunkel, chairman publicity committee.

> The regular September monthly meeting of CNGA has been postponed from the first Thursday of September (7th) to the 15th. This is due to conflict of speakers' dates. Meeting will be held at Barker Bros. as usual.

H. L. Eggleston, director; F. A. E. Lowell, director; F. E. Davie, director; W. C. Dayhuff, chairman, program committee; R. D. Gibbs, director; J. S. Fluor, Jr., director; R. W. Heath, director; F. J. Colton, director; G. C. McLaren, director.

You are reading the Pacific Coast oil men's home paper.

State Record Sales For Gasoline in June

Gasoline sales during June were highest for any single month in the history of California, it was reported by Richard E. Collins, chairman of the State Board of Equalization.

On the basis of the distribution of 166,062,425 gallons of gasoline, the tax levied for the month amounted to $4,981,872.75, an increase of $337,645.74 or 7.27 per cent over the same month of the previous year.

Gasoline tax income for the first six months of the year has mounted to $26,091,955.38, an increase of $1,094,102.16 over the levies made for the first half of 1938, Collins reported. The June income also was substantially higher than the $4,702,550.88 listed for the month previous.

Heavy tourist traffic en route to the Golden Gate Exposition and other points of interest throughout California were credited for much of the increase.

Oil companies reporting sales of more than 300,000 gallons in June were listed by the board with the explanation that resale of gasoline previously taxed and exempt sales to the Federal government or in interstate or foreign commerce accounted for differences between total sales and taxable sales. These companies were as follows:

Name	Gallons Actually Sold	Net Taxable Gallonage
Aromalene, Inc.	443,770	443,770
Bankline Oil Company	566,036	497
Belridge Oil Company	1,741,815	392,450
Brown, Henry, dba., Operators Oil & Refinery	738,478	738,537
California Oil & Refining Co.	391,208	391,208
Caminol Company, Ltd., The	2,887,261	2,369,557
Century Oil Company	984,525	838,268
Coline Gasoline Corporation	762,551	687
Cowan Oil and Refining Co.	595,038	None
Del Rey Oil & Gas Co.	564,048	None
Eagle Oil & Refining Co., Inc.	2,015,981	1,841,974
East West Refining Co.	697,992	697,863
El Camino Refining Co.	841,451	841,451
Elm Oil Co.	423,734	423,734
El Tejon Oil & Refining Corp.	1,020,021	960,071
Envoy Petroleum Co.	841,989	841,989
Estado Petroleum Corp.	1,626,133	1,625,817
Exeter Refining Co.	883,527	881,983
Fletcher Oil Co., Inc.	2,012,715	None
F. R. Long, Inc.	793,047	None
General Petroleum Corp. of Calif.	34,988,948	16,271,439
Gilmore-Dabney, Inc.	386,848	None
Gilmore Oil Co.	6,424,234	9,984
Hancock Oil Co. of Calif.	4,562,825	1,208,159
Harbor Refining Co.	685,474	685,474
Harbor Terminal Oil Co.	479,348	479,348
Honolulu Oil Corporation	712,772	7,919
Kern Oil Co., Ltd.	1,059,299	407,276
Krieger Oil Co.	642,548	642,548
Lomita Gasoline Co.	1,567,871	None
Los Nietos Producing & Refining Co.	2,761,746	946,144
Macmillan Petroleum Corp.	2,347,828	2,265,661
Maguire Oil & Refining Corp.	466,514	331,877
McCallen Refining Co.	835,402	835,402
Meek, Herbert A., dba. Henry H. Cross Co.	393,274	None
Mercury Petroleum Corp.	466,557	466,557
Moffett, J. O., San Fernando Refining	395,124	395,120
Mohawk Petroleum Corp.	4,801,106	2,247,999
Norwalk Co., The	1,456,877	1,237,989
O. C. Field Gasoline Corp.	1,618,943	129,743
O. F. Collinge, Inc.	614,510	None
Olympic Refining Co.	1,192,608	1,174,286
Pacific States Oil & Terminals	2,089,962	2,011,990
Pacific Western Oil Corp.	422,390	1,058
Pan Pacific Oil Co.	318,657	308,205
Petrol Corporation, The	1,559,393	834,182
Petrolane, Ltd.	469,175	213,079
Richfield Oil Corp.	21,493,263	18,853,825
Rio Grande Oil, Inc.	3,476,600	None
Rothschild Oil Co.	887,371	887,371
R. R. Bush Oil Co.	1,365,199	1,361,173
Seaboard Oil Co. of Delaware	1,149,627	None
Seaside Oil Co.	3,912,772	1,328,968
Shell Oil Co., Inc.	36,909,767	16,614,261
Signal Oil & Gas Co.	1,101,946	None
Signal Oil Co.	5,886,203	None
Socal Oil & Refining Co.	811,607	687,049
Standard Oil Co. of Calif.	73,834,459	29,831,776
Sunset Oil Co.	2,709,100	None
Superior Oil Co.	2,092,677	73,258
Texas Co., The	10,326,571	8,866,829
Tide Water Associated Oil Co.	25,787,606	14,425,978
Torrance Refining Co.	347,542	347,542
Triangle Oil & Refining Co.	646,475	646,475
Union Oil Co. of Calif.	24,141,675	15,250,098
West Coast Refining Co.	408,952	None
Western States Gasoline Corp.	2,777,701	118,297
Wilmington Gasoline Co.	306,888	None
Wilpower Refining & Distributing Co., Inc.	386,147	330,292
Wilshire Oil Co., Inc.	8,690,788	8,378,691

Propulsion System Saves Fuel

Two diesel motor tankers equipped with the first American installation of electro-magnetic slip coupling drive with diesel engines and reduction gearing showed remarkably low fuel consumption recently on their first trips. One tanker burned 27 bbl. of fuel oil as against the usual 96 barrels. The other consumed 105 barrels as compared to 309 previously required for steam operation.

With this novel method of propulsion, either propelling engine can be instantaneously uncoupled without interfering with the remaining engine. High frequency vibrations from the chankshaft or shocks from the propellor are stopped at the coupling. Operation at low propellor speeds without reduction of power facilities maneuvering. The two propulsion engines for each ship are 2-cycle, 7-cylinder diesels, rated 730 hp. each at 400 revolutions per minute.

Manufacture of Synthetic Rubber

Cheap sources of synthetic rubber have been found in mineral oil residues —by-products of the petroleum cracking process—and sulfur. The synthetic rubber is said to be similar to the natural product in properties, and can be vulcanized.

The oil first is mixed and baked with crude sulfur. Rosin is added and the mixture is additionally baked. Sulfuric acid is added, followed by hydrochloric acid. After the acid treatment comes neutralizing with caustic soda and drying the rubber mass.

Another new substance, rubber-like in character, has been created from sulfur and chloro-benzine at a temperature of 240-260 degrees centigrade. It is the product of 10 years of research in the vapor phase treatment of organic compounds with molten elements, particularly sulfur and selenium.

Remarkable property of the new substance is that the rubber-like property is lost when the substance is dissolved and is regained again upon precipitation with acid. This may mean that cloth and similar substances may be impregnated with it.

Motor Freight Lines Popular in California

Railroads are operating motor trucks. Out of San Francisco, one company is operating fast freight lines to Reno, 235 miles; to Medford, Oregon, 400 miles; and to Klamath Falls, 396 miles.

The fleet consists of 14 diesel trucks, six-wheel, dual-drive jobs with a capacity of seven tons.

LAUGH THIS OFF

By the way, it has been estimated that there are five billion birds in the United States. If we find the one who stole the nozzle off our garden hose, however, there will only be 4,999,999,999.

"I've been on this road ten years," said the street car conductor in a burst of confidence, and you could have felled him with an obsolete transfer when **Bill Hay** enquired blandly, "Is that so? What street did you get on at?"

Whereupon Val Cassidy, the golf wizard, interrupts briefly to offer some much-needed elucidation on the terminology of the ancient game. For instance: A stroke is what an amateur has when he breaks a hundred.

A tee is a wooden tack, on the head of which the ball sits nonchalantly while the perspiring player digs a moat around it with a driver.

"Keeping the head down" is a term indicating what the player who scores 128 on Saturday should do the rest of the week.

And perhaps we have already mentioned that one of the most pathetic sights in the industry is that of a natural gasoline tester trudging his weary way homewards after a busy day at the orifice.

"Keeping your eye on the ball" is an essential practice in the less reputable clubs.

The pivot is a graceful motion of the body that enables the player to miss the ball with much greater force.

And fore is a shout of triumph uttered by the player whose tee shot strikes a member of the slow foursome ahead.

But this can go on indefinitely, so let us change the subject and give our old friend **O. C. Field,** an opportunity to dilate on his favorite topic—ornithology. O. C. found a new bird in his own back yard last week, and was about to communicate with the Ornithological Society when one of the neighbors came over and asked him to give it up so that they could get on with their badminton game.

Then there was the Fullerton oil man who furnished his new home with period furniture. He only had it a short period when it was taken away.

Andy Anderson, the well-known hazard eliminator, now points out that motor performance has been so tremendously improved you simply can't tell there's a car on the road until you've been run over.

Bill Roper, another of the natural gasoline purveyors, tells us that accurate and precise mechanisms are being perfected for all sorts of purposes now. The chiropractors even have a device they call the neurocalometer for measuring nervous energy. Bill swears they tried it on a C.N.G.A. member a short time ago and he busted the thing all to pieces.

Andy, you will remember, is the lad who developed the wanderlust trying to find a place to park.

And who discovered that white pants stay cleaner much longer if you wear smoked glasses.

Did we ever tell you, by the way, about the ingenious shipper who tagged his cans with the following significant inscription: "Ice Cream. If not delivered in 5 days, never mind."?

Which recalls **Phil Rockfellow's** unique method of picking out the weeds in his garden. He simply yanks out all the plants, and if they come up again, they're weeds.

All of which concludes a most illuminating session. Remember, a hen doesn't get excited when she can't find things where she lays them.

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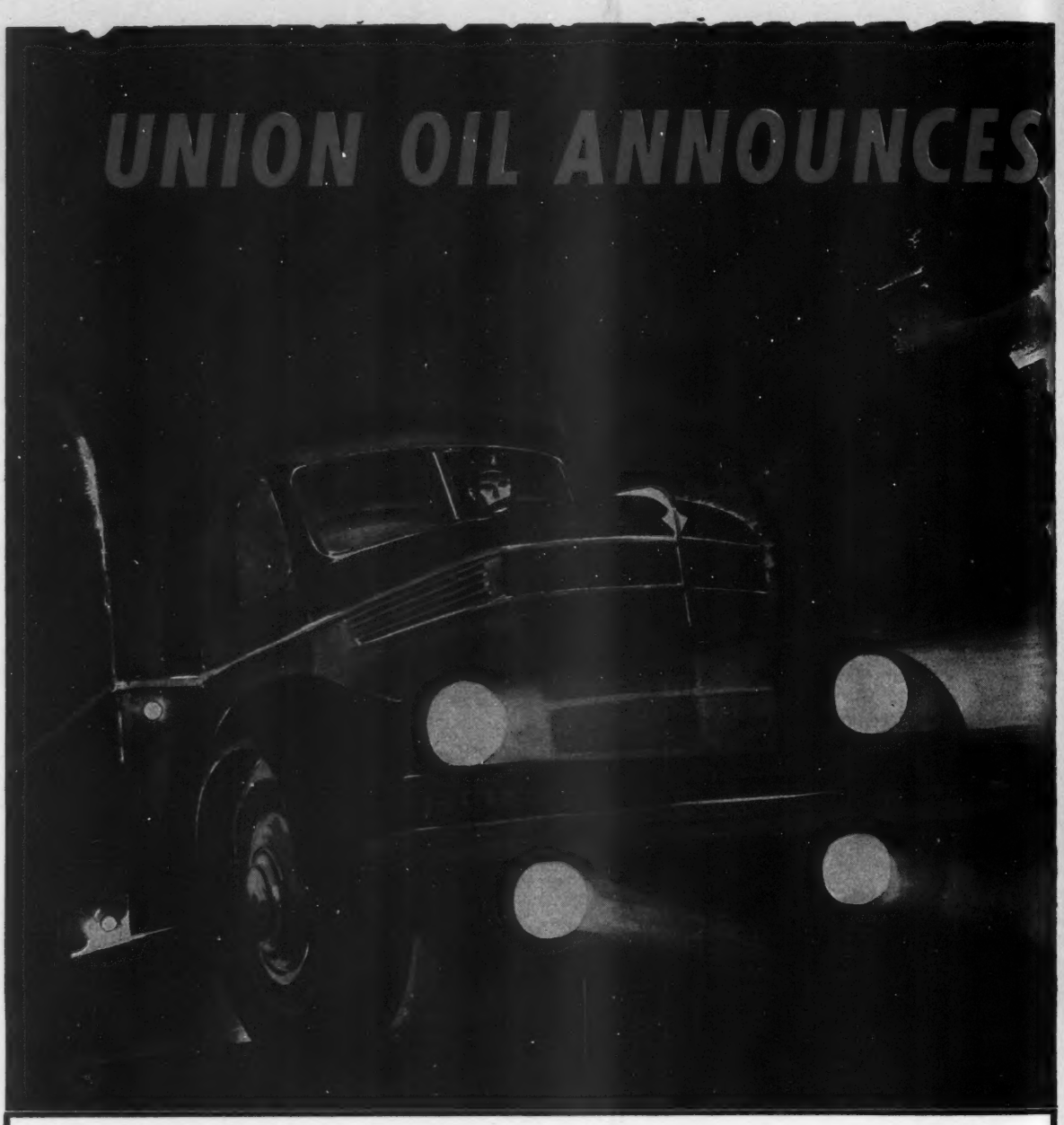
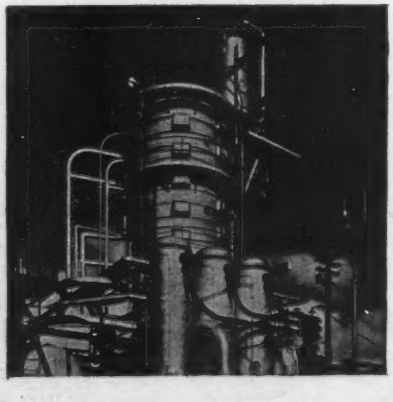


PROVED IN 14 MONTHS OF RIGID TESTING



Unacal Truck-Bus Motor Oil is a thoroughly proved product. It has been put through every field and laboratory test that our engineers could devise. And it has been in actual service in a number of Pacific Coast fleets. These fleets were carefully selected to give Unacal a thorough testing in every type of service—under all kinds of conditions. Only those with low maintenance-cost records were chosen. Yet in spite of this fact, Unacal came through with flying colors. All the operators reported even lower maintenance costs with Unacal than they had previously experienced.

When you can buy an oil that performs like that, at the price Unacal will sell for, it's *news!* Because the day you switch to Unacal, your operating costs start going *down!*

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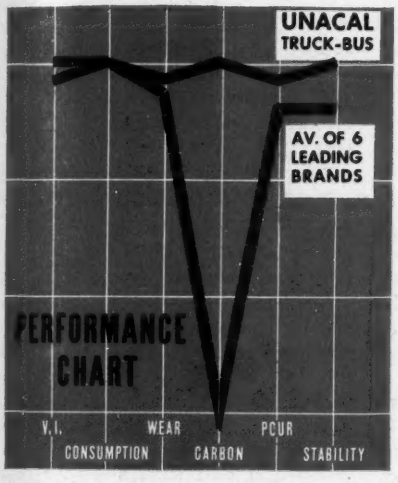
Made by the same Propane-Solvent process that produces TRITON, this new, 100% pure paraffin-base oil out-performs every other fleet oil in its price class... cuts operating costs... gives you balanced lubrication that meets all the requirements of pounding, heavy-duty service.



UNACAL IS BALANCED!

Balance is the secret of Unacal's success. As this performance chart shows, no one quality has been exaggerated at the expense of another. Some oils may have a higher V. I. rating, but no competitive brand fills *all* the requirements of heavy-duty service as well as this 100% pure paraffin-base lubricant.

In developing Unacal Truck-Bus Motor Oil, our engineers realized that the ideal fleet oil must give *balanced* performance. So they set out to produce a lubricant that would meet *all* the requirements of heavy-duty service without slighting some, or over-emphasizing others. The results have been remarkable. This 100% *pure* paraffin-base oil gives you:

1. LOW ENGINE WEAR—Unacal's wear index is lower than the average of the 6 leading truck and bus oils. This means more hours on the highway for your fleet...less in the repair shop.

2. LOW CONSUMPTION—It stands up as well as *any other* fleet oil.

3. LOW CARBON—Because it is Propane-Solvent refined, Unacal has far lower carbon-forming tendencies than any of the other competitive oils. This means fewer carbon scrapes...better motor performance.

4. LOW SLUDGE—Because it is unusually stable, Unacal shows marked superiority to all the others in the sludge and gum-forming tendencies. Eliminates stuck piston rings, stuck valves and plugged oil lines.

5. VISCOSITY INDEX—The viscosity index of Unacal has been *purposely* established at a lower level than competitive oils in order to gain the *balance* in other characteristics that make Unacal so superior. The V. I. is more than sufficient to assure easy starting under all Pacific Coast climatic conditions.

6. LOW COST—Unacal cuts costs two ways: You save on maintenance because it gives you *better* lubrication. You save on initial purchase price, because it's sold at a figure that will surprise you. Unacal is marketed only in single-trip, refinery-sealed barrels of 53 gallons. Ask the Union Oil agent in your district for complete information.

UNION OIL COMPANY

OWNED AND OPERATED FOR OVER 48 YEARS BY PACIFIC COAST PEOPLE

UNACAL

TRUCK-BUS MOTOR OIL

Field Developments

San Joaquin Valley

Wilshire Plans to Drill Rio Bravo Outpost Try

Wilshire Oil Co. has announced location for Campen No. 1 in the southeast corner of sec. 1,29-25. The site is approximately three quarters of a mile southeast of the southerly limits of the Rio Bravo field, and three quarters of a mile north of General Petroleum's Sullivan No. 1 which is drilling for the Rio Bravo sand in section 12.

Shell Abandons Cantua Creek Outpost Attempt

Prevailing optimism for the discovery of commercial production north of the Coalinga Field was greatly depressed by the findings in Shell Oil Co.'s Port Costa No. 48-30. Located in sec. 30,17-16, ten miles north of Coalinga production the well was drilled to 10,711 ft., bottoming in Cretaceous shale. Slight oil showings were encountered at 7065 and 7560 ft. but for all practical purposes the entire geologic column penetrated was barren. The placement of findings was: top of the Temblor, 6940 ft.; top of the Vaqueros, 7500 ft.; top of the Kreyenhagen, 7975 ft.; top of the Eocene, 8900 ft.; base of the upper Eocene, gray sand, 9225 ft.; top of the so-called lower Eocene, 9685 ft. and top of the Cretaceous shale, 10,565 ft. Abandonment of the geologically important well was effected on July 27.

Adding to the disappointment concerning the Fresno County wildcats is The Texas Co.'s Loescher No. 1. Located in sec. 12,17-16, the well is drilling in hard Eocene shale. Important markers encountered are the McClure at 5925 ft., the Temblor at 6840 ft., the Kreyenhagen at 8250 ft. and the Eocene at approximately 8900 ft. The test is now drilling below 9300 ft. with the apparent intention of locating the Cretaceous.

Superior Oil Co.'s S.P.L. No. 1, sec. 15,18-16, is also drilling in barren Eocene near 11,000 ft. Top of the Kreyenhagen was found at 9075 ft. and the top of the Eocene at 9878 ft.

Most northerly of the Fresno cats is Richfield Oil Corp.'s Turk No. 1. Located in sec. 4,17-15, the well topped the Temblor near 5800 ft. and was last reported coring below 6600 ft.

Union Oil Locates Buttonwillow "Cat"

Union Oil Co. is drilling a water well in preparation for a wildcat test of sec. 23,29-24. Location for the project, to be known as Bowerbank No. 4-23, is given as near the west quarter of the section. The drill site is about three miles southeast of the recently abandoned California Exploration Co. Salisbury No. 1, which was drilled to 12, 989 ft. and encountered much oil sand of low permeability. The theory that the Salisbury well was drilled too close to a fault lying north of the test will be tried out by the new well.

Amerada Completes Second Well

Completed with a potential 3192 bbl. daily rate of 27 gravity oil, Amerada Petroleum Corp.'s S.P.L. No. 26-17, becomes the second producer in the Coalinga Northeast area. With bottom at 9000 ft. and plugged to 8343 ft. the well is flowing from 177 ft. of the Gatchell zone. The flow is through a 9/64 in. and an 11/64 in. tubing bean and is accompanied by a 2,400,000 cu. ft. flow of gas.

Located in the discovery section 17, 19-16, the well is one location northeast of No. 7-17 which discovered the shoreline deposit. The company is rigging up No. 5-17 one location northwest, which places it one quarter of a mile due north of the discovery well.

Nearest offset drilling is being done by Union Oil Co.'s Cook No. 86-18, near the east line of the adjoining section. The well was drilling in brown shale below 7800 ft. when the drill pipe stuck at 5148 ft. The pipe is being cut and pulled from below 5000 ft. The green sand marker is expected soon after drilling is resumed as the Kreyenhagen was topped at 6870 ft.

South of the discovery area Standard Oil Co. is below 7000 ft. with well No. 73-19B. Located in the northeast quarter of sec. 19,19-16, the try has reported no significant formations to date.

Planning an intermediate well in sec. 30, 19-16 between the Northeast and Eocene Pool plays, Wilshire Annex Oil Co. has partially rigged up well No. 64-30B.

Western Gulf Hits Sand at Buena Vista

Western Gulf Oil Co. has encountered oil sand in KCL-Panhandle No. 1 Located a mile and a half from the southerly end of the Buena Vista Gas Field, in sec. 3,32-26, the well encountered oil sands believed to be the equivalent of the Stevens at 10,013 ft. which continued to bottom at 10,121 ft. A formation test from 10,009 ft. to 10,121 ft., with a 1500 ft. water cushion, open 36 minutes, blew gas at an estimated five million foot rate. Reporting a strong gasoline odor from the gassy mud recovered in the pipe, the company is sufficiently encouraged to resume drilling in search of black oil sands. The discovery correlate somewhat with the findings in the Ohio Oil Co.'s KCL No. A-8. Drilled in 1938, near the south quarter corner of sec. 32,31-26, the well reported oil sand of the Stevens equivalent at 10,018 ft. Very heavy 7 in. cas-

ing was run to 11,147 ft. and an exhaustive series of tests undertaken.

At the northerly end of the Buena Vista Gas Field, and in a location on the bed of the Buena Vista Lake, Richfield Oil Corp. is driving piles for a deep test well to be known as BVA No. 81-36. Located in sec. 36,31-25, the test will be one of the few holes drilled in the Lake bed.

Pleasant Valley Test Abandoned

Superior Oil Co.'s erstwhile "Mystery Well", P. V. No. 1, has been abandoned with bottom in Cretaceous shale at 9418 ft. The try was located between the Eocene Pool and the old Coalinga West Side Field, in sec. 22,20-15. The secrecy which surrounded the encountered formations during the life of the well, is being sustained ever after it's demise. Consensus of opinion places the top of the barren Eocene near 7400 ft. and the top of the Cretaceous slightly below 8200 ft.

E. A. Parkford & Associates' Coalinga No. 45-24C, sec. 24,20-15, lying between the Superior abandonment and the Eocene Pool, is drilling below 4850 ft. in

SAN JOAQUIN VALLEY WILDCATS

Fresno County

Area	Well	No.	Section	Depth	Status
Cantua Creek	Richfield Oil Corp., Turk	1	4, 17-15	6645	Drilling
	Shell Oil Co., Port Costa	48–30	30, 17-16	10711	Abandoned
	Superior Oil Co., S.P.L.	1	15, 18-16	10984	Drilling
	The Texas Co., Loeschner	1	12, 17-16	9366	Drilling
Coalinga	Amerada Pet. Corp., SPL	26–17	17, 19-16	9000	Producing
	Bandini Pet. Co.	48–18	18, 19-16	8015	Drilling
	Parkford, E. A. & Assoc.	45–24C	24, 20-15	4718	Drilling
	Rylatt, Harry E., Kipling	3	26, 20-14	2010	Idle
	Standard Oil Co.	73–19B	19, 19-16	7083	Drilling
	Stuart Oil Co.	1	12, 21-14	1410	Idle
	Superior Oil Co., P.V.	1	22, 20-15	9418	Abandoned
	Union Oil Co., Cook	86–18	18, 19-16	7818	Drilling
	Wilshire-Annex Oil Co.	64–30B	30, 19-16		Rigging up
Fresno Area	Seth Turner	1	4, 14-19		Rigging up
Gatos Creek	Gatos Creek Oil Co.	1	19, 19-13	294	Idle

Kern County

Antelope Valley	Snavely, P. D.	1	32, 25-17		Foundation
Buena Vista	Gen. Pet. Corp., B.V.A.	1	1, 32-24	7521	Drilling
	Richfield Oil Corp., B.V.A.	81–36	36, 31-25		Piles
	Shell Oil Co., B.V.A.	45–9	9, 32-25		Grading
	Western Gulf Oil Co., K.C.L., Panhandle	1	3, 32-26	10121	Drilling
Buttonwillow	Union Oil Co., Bowerbank	4–23	23, 29-24		Rig
Devil's Den	Luxton, W. L.	1	27, 25-18	710	Idle
	Emigrant Hill Oil Co.	1	24, 25-18	4271	Idle
Edison	O'Rielly, Francis, Edison-Seale	5–27	5, 30-29		Rig
	Petrex, Inc., Metro	2	6, 30-29	2700	Rigging up to deepen
Grapevine	Richfield Oil Corp.	KCL 1	28, 11-20	11004	Cleaning out
	The Petrol Corp., Reserve-Petrol	33–5	33, 11-19	9142	Drilling
Greeley	General Pet. Corp., Sullivan	1	12, 29-25	8249	Drilling
	Standard Oil Co., KCL	12–5	7, 29-26	5959	Rigging up to deepen
Lost Hills	California Lands, Occidental	2	24, 26-20	8320	Abandoned
Midway	Baker, Leyse & Sonne	1	20, 32-23		Rig
Mt. Poso	Hill, F. J. & Assoc., Hill	1	35, 26-28		Location
Richfield Western	Richfield Oil Corp.	A-12-33	33, 30-25	8466	Drilling
	Standard Oil Co.	KCL 21-1	19, 30-25	9900	Drilling
Richgrove	Crusaders Pet. Corp., Quinn	1	9, 25-27	1475	Idle
	Dilamar Oil Corp., Quinn	3	15, 25-27	2902	Idle
San Emigdio	Bannow, Louis E., Irvin	1	15, 10-23	1900	Idle
	Continental Oil Co.	KCL F-1	5, 10-21	7186	Drilling
	French Oil Co.	1	14, 10-23	604	Drilling
	Shell Oil Co.	KCL 2A 52-13	13, 11-22	9384	Drilling
Strand	Continental Oil Co.	KCL D-2	14, 30-36	12339	Drilling
Upper Kern River	Kern Valley Drilling Co.	1	4, 29-29	800	Drilling
Wasco	Getty, George F., Janssen	1	7, 27-24	12584	Drilling

Kings County

Strattford	P. W. Burnham & Assoc., Bartells	1	23, 20-20		Rig
Tulare Lake	Grahpic Oil Co., Taylor	1	34, 23-20		Rigging up

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an effort to find shoreline production southwest of the field.

Greeley Outposts Drilling Ahead

General Petroleum Corp.'s Sullivan No. 1, located northwest of the Greeley field to which it expects to add area, is drilling below 8185 ft. Located in sec. 12,29-25, the well took no cores in the Greeley zone on its way to the expected Rio Bravo pay zone.

Standard Oil Co., discoverer and operator of all proved properties at Greeley, has resumed work on KCL No. 12-5. Located in sec. 7,29-26, between the Sullivan well and the field, the well was drilled to 5959 ft. before suspension in July of 1938 for private reasons. The job is now being rigged up in preparation for a look at the Vedder zone.

Lost Hills Deep Test Abandoned

California Lands, Inc. has abandoned Occidental No. 2 in sec. 24,26-20. After No. 1 proved barren in the Temblor, No. 2 was located to the east and drilled to 8320 ft. A formation test of the Temblor topped at 5538 ft., yielded 3000 bbls. salt water. Poor oil sand was encountered at 6000 ft. with the next marker being gray sand at 8225 ft. which is considered to be the equivalent of the deep zone at Belridge.

Get. Pet. Buena Vista Area Test Drills Ahead

General Petroleum Corp.'s BVA No. 1 is again drilling. Delayed by a fishing job at 6840 ft. and a hole straightening redrill project at 3717 ft. the well is now getting to interesting depths. The test is spot coring ahead after reporting hard shale at 7475 ft.

Petrol Corp. Makes Up All Lost Hole

The Petrol Corp. has made up all the hole lost by stuck drill pipe in Reserve-Petrol No. 33-5. Located on the flat lands at the base of the Ridge in sec. 33,11-19, the well had made 8946 ft. when the mishap occurred. Redrilled from a plug at 6855 ft., the new hole was made chiefly through basalt. The project is drilling now below 9100 ft. in gray sand in an effort to find the Oligocene sands from which the Richfield Oil Corp. is attempting to produce KCL No. 1 at Wheeler Ridge. The Richfield try lies atop the mountains some five miles northwest of the Petrol test, and is at present attempting to shut off the salt water which has spoiled all production tests to date.

Standard Tests KCL No. 21-1

Standard Oil Co.'s KCL No. 21-1, sec. 19,30-25, which excited great comment with the announcement that it had cored the Stevens, has been tested to bottom at 9900 ft. and is now coring ahead. Located north of the Richfield-Western area, at the east flank of Elk Hills, the Stevens was first encountered at 9457 ft. Formation tests as 9553 ft., 9850 ft., and 9900 ft. have yielded only gassy mud and a little free oil testing 29 gravity.

Oils Inc. Deepening Old Magnet Fearon 2

Oils Inc. of Calif. is deepening Fearon No. 2. Originally bottomed at 4833 ft. by the Magnet Oil Co., the well was reported to be in gray Moreno shale, having found the Gatchell member missing. Oils Inc., acting upon the theory that the formations were misinterpreted or that possibilities exist in the Cretaceous, is now drilling below 5528 ft. in dark gray sandy shale. The test is located in sec. 18,20-15, near the easterly flank of the Coalinga West Side Field.

Tulare Lake Area To Get Driller

Graphic Oil Co. is rigging up to drill Taylor No. 1 on sec. 34,23-20 in the Tulare Lake Area. Located four miles southeast of Dudley Ridge gas wells, the test lies in a large undrilled area.

Holly Dev. Hangs Up Test 82-12C

Holly Development Co. has suspended No. 82-12C. Located at the westerly edge of Eocene Pool production, in sec. 12,20-15, the well was drilled to 6686 ft. in gray siltstone which is the equivalent of the basal siltstone in the producing area. Having encountered the top of the green sand at 6285 ft., the grit zone at 6296 ft. and top of the basal siltstone 6616 ft., the well is standing idle with bottom plugged to 575 ft. Hope for extending the west limits of the pool is not abandoned since other portions of the lease could conceivably be productive.

Antelope Valley To Get Drill Test

P. D. Snavely is pouring foundation for well No. 1 in sec. 32,25-17. Located in Antelope Valley, the try is in an area undrilled for a radius of several miles, and lies 10 miles west of the small Devil's Den Field.

Texas Exeter 2 Finds Gatchell Thickening

With 659 ft. of the Gatchell sand open from 7438 ft. to bottom, The Texas Co. is completing Exeter No. 2 after cementing 7" pipe at 7424 ft. Zone penetration of No. 2 is more than 200 ft. greater than in Exeter No. 1. The great sand thickness augers well for the northerly extension of this highly productive area.

Continental Corporation Wins Harbor Decision

Ruling that the Long Beach zoning ordinance was unreasonable, arbitrary and discriminatory, Judge Joseph Vickers unofficially granted the Flood Control District and its lessee, Continental Corp., the right to drill the 60 ft. strip between the west bank of the channel and the west line of the right-of-way through the harbor oil field. Under the decision the operators may whipstock wells from the narrow westerly strip to any location under the nearly 800 ft. wide Los Angeles River from Anaheim Blvd. south to the Pacific Ocean. A Long Beach ordinance previously prohibited drilling east of the west channel line. During the suit which consumed nine days in court, the county was represented by W. B. McKesson, and the Continental Corp. by Geo. H. Emerson. The Continental Corp., which is headed by R. F. Ingold and Robert V. New, expects to start work immediately on the first of at least a dozen wells.

Besides the County Flood Control District, several individual owners will benefit by the decision.

Petroleum Industry Invests $18,400 for Each Worker

To provide employment for its nearly 1,000,000 workers, the American petroleum industry has invested an average of $18,400 for each worker, recent studies reveal. The investment per worker is heaviest in the production branch where it averages $47,000 for each worker, and least in the marketing department where it averages $6,000.

Total investment in the petroleum industry, approximating $15,000,000,000, has almost doubled in the past 16 years and is rapidly increasing due to the constant replacement of relatively new but technically obsolete equipment. Introduction of improved refining processes has required new investments which in 1939 will reach an estimated total of more than $100,000,000.

Because of the high ratio of investment per worker, and because demand for petroleum products is becoming less seasonal, continuity of employment is substantially higher than the average for all manufacturing industries.

Los Angeles Basin

Long Beach Deep Test Protects Alamitos Zone

Dormax Oil Co. is again making hole after cementing 11¾ in. casing at 3290 ft. to protect the Alamitos zone. No surface casing was set in this well, the 11¾ in. being "multiple staged" at 1775 ft. Nearly 3000 sacks of cement were used on the two jobs. The project, located on 25th St. east of Walnut in the old section of the Signal Hill field, will be carried down as a deep test.

El Hondo Petroleum Co. is cleaning out the old Venaga well near the intersection of Spring and Atlantic in preparation for redrilling and deepening to the 8000 ft. level.

Richfield Oil Corp. is drilling a new well, No. B-8, on the Long Beach city owned Reservoir Hill. Bottom is yet at shallow levels, the project having been lately spudded in.

On the Harlow-Kent lease, The Texas Co. is completing No. 15, a new well. The hole is bottomed at 4575 ft. and 7 in. casing has been cemented at 3625 ft.

Two and One Oil Co. No. 3, located in the Atlantic and Wardlow Road area, pumped only water after deepening to 5770 ft. and is plugging to test higher.

South Basin Oil Co. has had but little success in producing well No. 95, located on Willow west of Walnut. On the pump, very little fluid is recovered from the gun-perforated interval above bottom at 3193 ft.

A. S. Johnston Drilling Co. obtained a 90 bbl. yield of clean 23 gravity oil after redrilling the old Petroleum Securities Co. Bixby No. 2 north of Wardlow on Cedar Ave. The well now produces a 70 ft. interval to bottom at 4579 ft.

Another northwest redrill job is Union Oil Co.'s Oil Operators No. 1 which is preparing to deepen below the present bottom of 4150 ft.

Rosecrans Outpost Is Small Producer

After nearly a week of alternately swabbing and cleaning out, King & Weymouth obtained a flow of approximately 150 bbls. a day in their Averill No. 2 located nearly a half mile south of the Rosecrans field. A few days previous, the Howard Oil Associates' original southern outpost was placed on production after gun-perforating a 60 ft. interval above the shoe of the water string cemented at 7552 ft. The well had refused to produce when tested from 7552 ft. to bottom at 7644 ft. but with the additional zone open flowed at a 100 bbl. rate. The oil from both wells is said to be clean and tests slightly over 30 gravity. Averill No. 2, bottomed at 7837 ft., is reported to be about 150 ft. lower structually than its neighbor.

Believing that the most prolific part of the new Rosecrans Extension will be southeast of the field, Barnsdall and Wilshire Oil Cos. have jointly spudded Darling Community No. 1 near the intersection of San Pedro and 154th Sts. Between the two sections, however, several independent companies are planning immediate drilling.

Southern California Petroleum Co.'s Slabaugh No. 1, a northerly offset to the Howard project, is fishing drill pipe after drilling to 6860 ft.

Montebello Completion Frequency Much Increased

With greatly accelerated frequency wells are being completed in the west end hot spot of the Montebello field, the average jumping from three to six a week. Most significant of recent completions is John McKeon & Associates' Cowan No. 1 located north of Lincoln and 500 ft. west of Poplar. With bottom at 7646 ft. and 7 in. casing cemented at 7508 ft., the well was brought in through the casing flowing 1500 bbls. and an unestimated amount of gas through 64/64 inch bean under 300 lbs. pressure. The upper gas sands were cased off in this well.

Fullerton Oil Co.'s east end outpost, Trustee No. 1, cored to 7660 ft. and is making a production test after cementing 7 in. casing at 7510 ft. Some doubtful looking sand was cored in the lower section of the hole which may have to be plugged off. Stratigraphically, the well is about 65 ft. lower than McKeon's.

Another good 8th zone completion was Star Petroleum's Banks No. 1 offsetting Graham & Loftus' Coffman No. 1. With the hole bottomed at 7650 ft. and casing cemented at 7400 ft., the well was swabbed in flowing 1375 bbls. of oil and an estimated 2,500,000 cu. ft. of gas.

Seeking to extend the field to the west, The Texas Co. is preparing to drill on its recently acquired Wilcox lease at the northeast corner of Beverly and Oak St.

British American Oil Producing Co. has two new projects on that portion of the Howard & Smith property subleased from the Union Oil Co., lying south of Beverly Blvd. The company's first production in the field will be from Oswald No. 1 on Lincoln Ave. which is completing at 7643 ft.

Throughout the field 50 wells are actually working while locations have been filed for an additional 15.

LOS ANGELES BASIN WILDCATS

Area	Well	No.	Section	Depth	Status
Castaic	Lang, Ed. W., Rupy	1	7, 5-16	510	Idle
Gardena	Citizens Oil Co., Dunn	1	30, 3-13		Grade
Inglewood	Vanguard Oil Co., L.A.I.	1	29, 2-14		Rig
Mint Canyon	Redwood Oil Co., Mitchell	1	22, 4-15	300	Junked hole
	Redwood Oil Co., Mitchell	2	22, 4-15	275	Drilling
Montebello, West	Ridge Oil Co., Sea Cliff	1	3, 2-12	8039	Idle
Newhall	Mangrum and Page, Lintz	1	4, 3-15	352	Idle
Palos Verdes	Rolling Hills Pet.	1	27, 4-14	5815	Drilling
Playa del Rey	The Texas Co., Inglewood Est. Co.	1	34, 2-15	5780	Drilling
	Vulcan Oil Co., Del Rey	1	22, 2-15		Rig
Puente	Stabeck & Assoc.	1	14, 2-10		Rig
San Pedro	Sepulveda Oil Co.	1	23, 5-14	1100	Drilling
Sunland	Casa Grande Oil Co., Lopez-Lundy	1	1, 2-15	1050	Idle
Towlsey Canyon	J. E. O'Donnell	1	8, 3-16	5225	Bailing
Whittier	C. W. Partridge, Hillside	1	22, 2-11	1780	Idle
	Taylor Drlg. & Prod. Co., Gregg	1	17, 2-11	6058	Idle
	Vulcan Oil Co., Drake	1	17, 2-11		Location
	San Bernardino				
Carbon Canyon	Carbon Canyon Oil Co.	1	30, 2-8	256	Idle
	John Hokom Oil & Gas Co., Ltd.	1	31, 2-8	2941	Pumping water

NORTHERN COUNTIES WILDCATS

County	Well	No.	Section	Depth	Status
Colusa	Empire Oil & Gas Corp., Dunlap	1	36, 16-5		Location
Humboldt	The Texas Co., Eureka	3	21, 3-1	1798	Drilling
San Benito	Silver Creek Oil Co.	1	11, 17-11	160	Drilling
Sutter	Buttes Oilfields, Inc.	5	1, 15-1	5455	Shut-in
Yolo	Standard Oil Co., Corcoran	1	29, 9-1		Location

New Well Started At Beach Five Points

Derrick has been erected in the Huntington Beach Five Points area for Island View Oil Co.'s first well on the Day lease, south of J.E.F. Oil Co.'s Bruce No. 1. One location to the east, L & W Oil Co. is planning to start work immediatley on property south of Petromont's 100 bbl. pumper.

In the old field, V. R. G. Wilbur is preparing to recomplete Heaston No. 1 after redrilling to 3660 ft.

The two projects on the flat east of town have been unable to clean out to the old bottoms, but neither has yet given up.

On the ocean front, Southwest Exploration Co. is preparing to bring in No. 17 and is drilling No. 21 at 1578 ft.

Union Oil Gets Two Dominguez Producers

Two good producers were added to Union Oil Co.'s long list in the Dominguez field during the past few days. Most spectacular was Callender No. 70, most northwesterly well in the field. Bottomed at 7355 ft. and with 7 in. casing cemented at 6731 ft., a liner was run containing 385 ft. of perforations. Completed on the 30th of July, the initial production was gauged at 865 bbls. in 17 hours through a ½ in. bean. Several days later the yield was 1025 bbls. of 32.5 gravity oil cutting less than 1.0%. The well has occasioned speculation as to the possibilitiy of extending the field to Avalon Blvd.

Twelve hundred feet south of No. 70, Union completed Callender No. 69 with 378 ft. open to 7547 ft. flowing 485 bbls. cutting 5.0%.

Wilmington Spotlight Focused on NE Area

Completion of Dumm Brothers Petroleum Corp.'s well at the intersection of Wilmington Blvd. and Jackson St. in the northeasterly section of the field has stimulated several independent operators to plan immediate development of recently acquired leases as far east as Pico Ave. and as far north as Anaheim Blvd. The Dumm project was bottomed at 3428 ft. and with 345 ft. of pre-pack perforations open, was completed flowing an estimated 200 bbls. through a 28/64 in. bean. Last reported production was 188 bbls. a day of 15 gravity oil cutting 2.5%. Dumm Brothers are planning to drill a second well and a leasing boom during the past month has accounted for almost all of the properties in the area.

On Terminal Island, Brookline Oil Co. cored the Tar sand at 2700 ft. and is preparing to set casing. Across the connecting channel to the north, Gremac Oil Corp. is preparing to spud well No. 2 which may be taken to the Ford Zone.

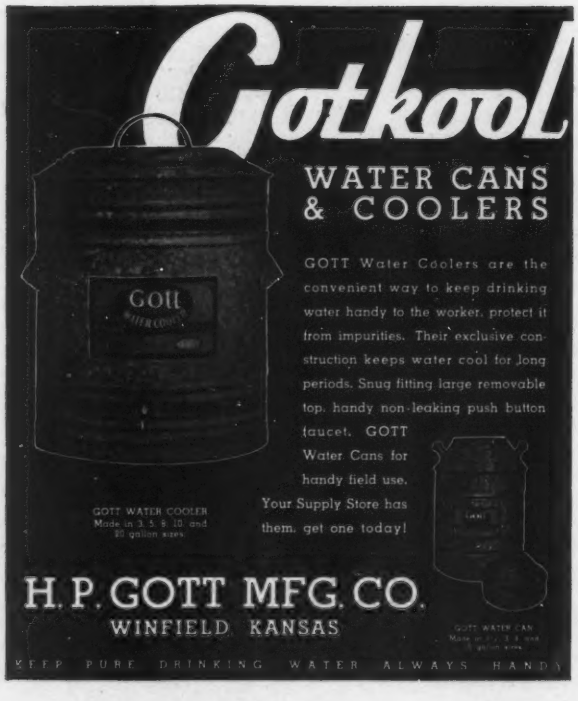
In the central townlot portion of the Wilmington area, two wells are completing in the Ford zone, Ring Oil Co. No. 4 and Zephyr Oil Co. Banning No. 21-5. Both are bottomed near the 5700 ft. level and will produce intervals below 5000 ft.

Despite the completion of 10 wells during the past two weeks, total field production remains near the 85,000 bbl. per day mark, a daily excess of 6000 bbls. over the Umpire's allowable.

Torrance Deep Test Junked and Abandoned

Short lived indeed was the deep test, Riviera Petroleum Co. No. 1, at the south edge of the late hot spot in the Torrance field. Hole was deepened from 5369 to 5655 ft. where a twistoff occurred junking the hole. As no encouragement had been found, the project was summarily abandoned.

F. S. D. Oil Co. No. 1, southerly outpost between Narbonne and Eshelman,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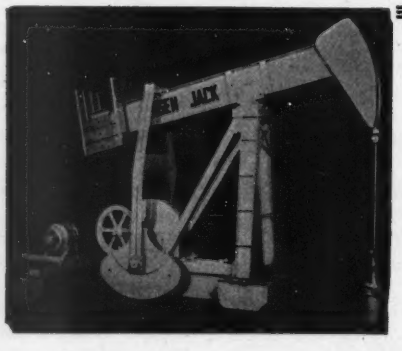

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finally obtained some oil in the 3800 ft. zone. After three months' efforts, production is now estimated at 25 bbls. a day of 17 gravity wet oil. The well was plugged back after finding the del Amo zone barren.

In the Extension area, D & B Oil Co. is pumping No. 5 at the rate of 75 bbls. a day with a heavy water cut. J. E. O'Donnell is preparing to spud his No. 73 and General Petroleum Corp. is planning to drill Poggi No. 15.

Seal Beach Well Proves Big Surprise

One of the industry's biggest surprises occurred recently when the Hellman Estate Co., under the direction of its engineer, Bob Garrison, obtained a flow of 1300 bbls. in one of its old wells. No. 4, drilled many years ago by Associated Oil Co., was deepened to 5580 ft. where it was returned to production as a small flowing well. Not satisfied with the 75 bbl. yield, the hole was plugged to 5120 ft. and the casing gun-perforated from 4840 ft. to 4860 ft. in the Selover zone. Before tubing could be run, the well started flowing of its own accord establishing its big potential. At present, production is 275 bbls. per day of 29 gravity clean oil and 500,000 cu. ft. of gas through an 18/64 in. orifice. Site of the freak gusher is the extreme east end of the Seal Beach field.

Severns Finishes Coyote Outpost

Severns Drilling Co. bottomed McNally No. 4 at 7016 ft. and, after gun-perforating below 6700 ft., completed flowing through the pump at a 275 bbl. rate. Gravity of the oil is close to 30 and the last water content reported was 20%. The well is located at the west end of the West Coyote field.

New Company to Drill Newhall-Potrero Area

Seeking an extension of the prolific Newhall-Potrero field, discovered and at present monopolized by Barnsdall Oil Co., a new concern, Newhall-Potrero Oil Co. is preparing to drill in the E½ of E½ of sec. 26,4-17. The proposed location for the first well is an easterly offset to the Rancho San Francisco property on which Barnsdall has five producing wells and is finishing two more. Said to be heading the company is William Meredith of Long Beach.

Barnsdall Oil Co. is preparing to complete R.S.F. No. 7 near the 7100 ft. level while No. 6, delayed by a fishing job, is drilling at 6600 ft.

V. Dumas Returns Starts Wildcat Well

Returning to California after prospecting for oil in Arizona, Vern Dumas is preparing to drill a wildcat well at the northwest corner of Main St. and Olive St., nearly a mile south of the Rosecrans field. Said to be associated with Mr. Dumas in the new company, which is called Citizens Oil Co., are C. C. Clements and J. E. Jeffers of Long Beach.

Rolling Hills Well Cores Nodular Shale

Reportedly working only one tour a day, Rolling Hills Oil Co. is coring nodular shale below 5800 ft. The test is located at the north end of the Palos Verdes uplift, and has been working intermittently for nearly two years. Many oil and gas showings have been encountered but no adequate body of oil sand has been found. A short distance to the west E. C. McLaren, Rolling Hills official, pumped a small quantity of oil from a relatively shallow hole drilled several years ago.

Vulcan Starts del Rey Test

Renewing the search for oil between Culver City and the Playa del Rey field, Vulcan Oil Co. is rigging up approximately 1500 ft. northwest of the intersection of Lincoln Blvd. and Culver. Two wells were drilled in the vicinity two years ago which found showings but no production in the schist.

South of the field, The Texas Co. is below 6000 ft. in Inglewood Extension No. 1, another schist test.

Towsley Well Fails On Deep Production Test

The Towsley Canyon well, deepened by J. E. O'Donnell from approximately 4100 ft. to 5225 ft., failed to produce more than a quantity of water with a trace of oil on a recent trial. Steps are being taken to attempt a recompletion in the upper interval where the well formerly produced a little oil. Nearly vertical dips were encountered during the drilling.

Whittier Test Plugs, Perforates

Apparently vain has been the try of Colorado Oil Co. to find deep production in the old Whittier field. The company carried No. 19 to 5417 ft. where 5½ in. casing was cemented and gun-perforated in several intervals from 4000 ft. to bottom. As only water was recovered on production trials, it is planned to plug and complete in the old shallow zone.

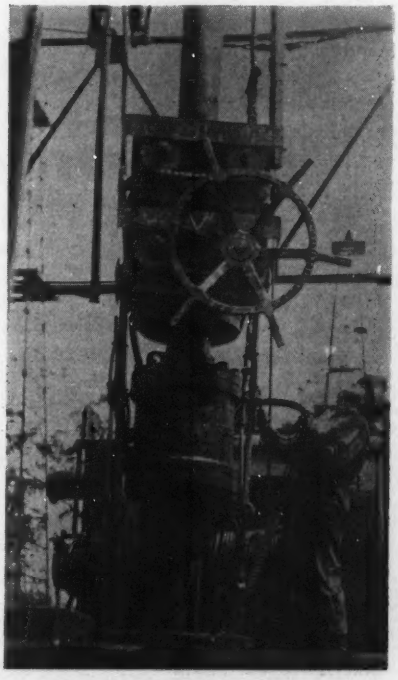
Hokom Well Pumps Water

On production test of the interval between 1290 ft. and plugged bottom at 1375 ft., the John Hokom Oil & Gasoline So. Carbon Canyon well pumped only water. The hole was drilled to 2941 ft. before plugging to the shallow depth.

In the same area, E. F. Stellas has cemented 6⅝ in. casing at the 3600 ft. level.

Aliso Well Flows 1474 Bbls.

Completing its third Aliso Canyon well, Porter No. 11, at a plugged depth of 5150 ft., Tide Water Associated Oil Co. obtained a yield of 1474 bbls. a day. Open to production is a 390 ft. interval below the shoe of the 8 ⅝ in. water string. Gravity of the oil, which is clean, is 22 degrees, and the flow is accompanied with 375,000 cu. ft. of gas.



Few wells will be completed in the richer deep sand of West Montebello without blowout protection.

Bolsa Chica Drills Snow No. 5 at Piru

After obtaining a 75 bbl. yield in its renovated No. 3, Bolsa Chica Oil Co. is drilling its No. 5 on the Snow lease at Piru. Located in sec. 4,4-18, the last reported depth was 1100 ft.

Coastal District

O. C. Field Abandons Santa Maria Wildcat

Ending an interesting test of the northerly plunge of the Los Flores structure, O. C. Field Gasoline Co. abandoned its Corporation No. 1 in sec. 21, 9-33, east of the old Santa Maria Field.

Drilled to 7382 ft., the well encountered the top of the Monterey at approximately 6000 ft. Casing was cemented at 6052 ft. and a production test was made from that point to bottom which recovered only sulphur water with a trace of oil.

Corporation No. 1 was spudded in and drilled to 5455 ft. several years ago, work not being resumed until April of this year when deepening operations were undertaken.

Bicknell Deep Test Cores Below 3700 Ft.

Zabala No. 1, Hogan Petroleum Co.'s deep test of the Bicknell area of Santa Barbara county, was last reported coring below 3700 ft. The project is located in sec. 33,9-34 and is seeking Monterey production similar to that found in the nearby Santa Maria district fields.

Edge Wells Hold Ventura Spotlight

Chief interest in the vast Ventura Avenue field is held by north edge wells, the latest to attract attention being Tide Water Associated Oil Co.'s McGonigle No. 14. Located half a mile due west of Lloyd Corp.'s No. 2 surprise producer, McGonigle No. 14 was completed in the same zone, except having taken over 1000 ft. greater penetration, flowing 1100 bbls. of oil and 1,000,000 cu. ft. of gas through a ¾ in. bean. Slightly higher structurally than Lloyd No. 2, casing was cemented at 9295 ft. and the hole bottomed at 10,975 ft. Hartman No. 8, another north side well, was completed by T.W.A. flowing 500 bbls. on gas lift.

Carpinteria Well Soon To Deepen

Renewing interest in the oil possibilities of the Carpenteria area, Carpenteria Oil Co. is preparing to resume drilling in its well at the corner of Palm and Land Sts. within the townsite. The project has been idle with bottom at approximately 250 ft. for more than a year.

Ten years ago Carpenteria made headlines in the oil news when an exploratory well of Continental Oil Co. at the easterly outskirts of town blew an estimated 10,000,000 cu. ft. of gas on a formation test. Although this well and several others encountered excellent gas and oil showings, none has actually produced commercially.

San Marcos Showings Remain a Mystery

Still a mystery are the supposed oil showings in Richfield Oil Corp.'s San Marcos Wildcat located in sec. 20,6-29, Santa Barbara county. Reported by the company to be in shale at 3200 ft., the well is claimed by local observers to have encountered several encouraging sand streaks. Richfield officials deny having any showing beyond the usual faint, meaningless colors.

United Western Continues Tests

Continuing its series of production tests, United Western Oil Co. has set a string of 9 in. casing at 3390 ft. and is swabbing the interval from that point to plugged bottom at 3500 ft. Previous tests of the hole, whose total depth is 3935 ft., are said to have indicated but little chance for production. Rumor has it that the well topped Franciscan schist at approximately 2800 ft. Site of the well is on Bradley property in sec. 15, 7-30, six miles northeast of Los Olivos.

Petrol Corp. Drills Directional Project

Whipstocking the hole from the surface location of Magenheimer No. 5-11, The Petrol Corp. is drilling No. 5-21 in the Gato Ridge field. The cost of directional drilling is much less in this field than is the cost of building roads over the rugged terrain, according to company engineers. The well is drilling in Monterey shale below 2900 ft.

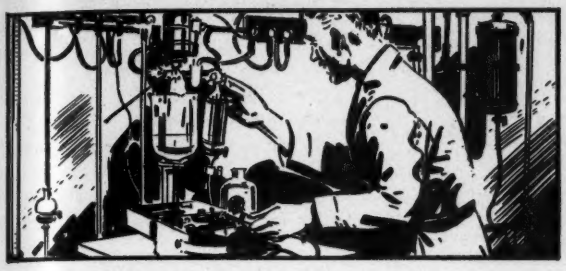
Sun-Bell To Drill Lompoc Outpost Well

Said to be planning immediate drilling is the Sun-Bell Drilling Co. which some months ago erected a rig on the Bell property at the west end of the old Lompoc field. Backing the concern are Jack Listle and Chaffee Earl.

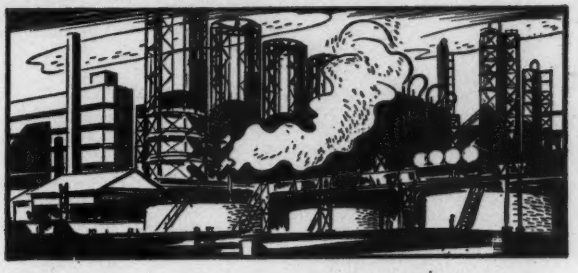
COASTAL COUNTIES WILDCATS

Area	Well	No.	Section	Depth	Status
Santa Barbara County					
Bicknell Area	Hogan Pet. Co., Zabala	1	33, 9-34	3660	Drilling
Capitan	Litho Oil Co., Rhode I.	1	4, 4-30	3015	Idle
Carpinteria	Carpinteria Oil Co.	1	32, 4-25	2450	Prep. to deepen
Carreaga	Barbara Pacific Oil Co.	A-A 2	8, 8-33	6820	Idle
Foxen Canyon	Richfield Oil Corp., Tinaquaic	1	36, 9-32	5541	Idle
Gato Ridge	The Petrol Corp., Magenheimer	S-21	2, 8-32	2909	Drilling
Orcutt	O. C. Field Gas. Corp.	1	21, 9-33	7382	Abandoning
	So. Calif. Drlg. Co., Houck	1	9, 9-33	5002	Idle
Lompoc	Sun-Bell Drilling Co.	1	28, 8-34		Rig
Los Olivos	United Western Oil Co.	1	15, 7-30	3935	Drilling
San Marcos	Richfield Oil Corp., San Marcos	1	20, 6-29	1961	Idle
	Richfield Oil Corp., San Marcos	2	20, 6-29	3164	Drilling
Summerland	Glenray Oil Co., Glenray	1	1, 4-26	90	Idle
	Oil Group, Inc., Hyland	1	16, 4-26	1315	Idle
	Topeka Oil Co.	17-1	22, 4-26	1770	Idle
San Luis Obispo County					
Elk Horn	Calif. Pet. Prod., Irons	1	19, 10-24	2384	Drilling
	Newton, S. M., Stafford	1	18, 31-21	3695	Reaming
	Newton, S. M., Well	1	3, 32-21		Grade
	Temblor Oil Co.	1	22, 31-21	3465	Idle
Paso Robles	Epco, Inc.	1	27, 26-13	5660	Idle
Ventura County					
Ojai	Coronet Oil Co., Coronet	1	17, 4-21	1597	Drilling
Red Mountain	Martin, J. W.	3	15, 4-21	1900	Idle
Sespe	Nevada-Fortuna Oil Co.	1	13, 4-19		Rig
	Renard Oil Co.	1	6, 4-19		Rig
	Speik Oil Co.	1	33, 5-19	3905	Cleaning out
Shiells Canyon	Galveston Oil Co.	1	5, 3-19	3140	Pulling liner
	Shomy Oil Co., Shomy	1	32, 4-19	825	Idle
Simi	Levesque, G. M.	1	17, 2-18	2210	Idle
Tar Creek	Section 20 Oil Co.	1	20, 5-19	3414	Drilling

"Why Richfield is — YEARS AHEAD"



1 "We've got a formula that will produce a real miracle fuel," said Richfield's Chief Chemist, "but it will cost millions of dollars to build a refinery that can produce it, because it contains six special ingredients to the ordinary gasoline's three."

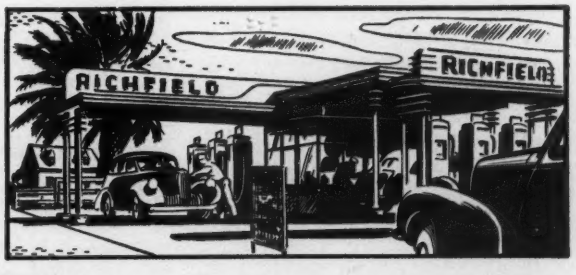


2 "If this new gasoline will out-perform all other non-premium fuels, we'll spend the millions," promised the management. So after more than 11 months of 24-hour-a-day construction, this great refinery, capable of producing a million and a half gallons per day, was completed.

3 "We've perfected 10 combinations of this formula," said the Chemist, "and it's up to our automotive engineers to test them against the popular competitive brands. We'll put them in barrels identified only by numbers and we'll get a true picture of their relative value."

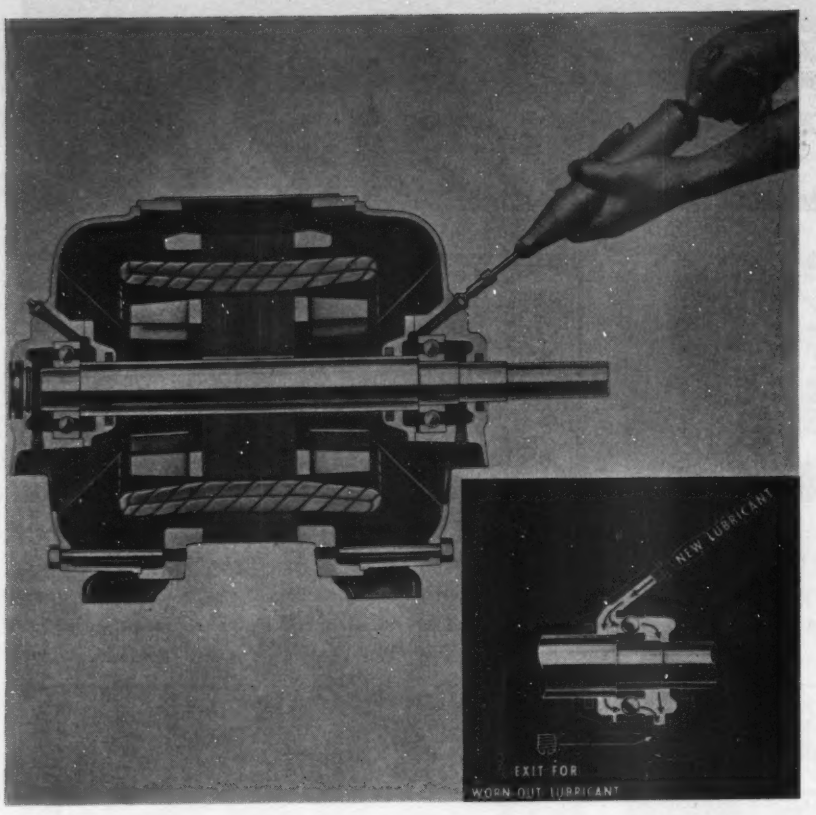
4 "That's okeh with us," said the automotive engineers, "for the first time in the West we'll test these gasolines exactly as they will perform in each motorist's car in the mountain snow, the desert heat — the city and the highway, and what's more we've got precision equipment from the East that is accurate to a split hair."

5 For 65 days they tested cars representing 92% of the types on the road today, and the reports went to the management—"Gentlemen, we've certainly got it—of the 16 fuels tested the first 5 were our new formulas and the Number 8 ran away from the field in every test. There's no argument about it being a real miracle fuel."



6 "So this formula Number 8 became the new ALL-TIME HI-OCTANE. It contains twice as many power-producing ingredients as found in the old types of gasoline and consequently is years ahead in performance. Talk to any of your friends that use it, and you, too, will be going places with Richfield."

RICHFIELD NEW MIRACLE HI-OCTANE



Engineers Develop Lubriflush System

The illustration shows the U.S. Lubriflush system of lubricating motor bearings which has been recently developed by U.S. Motor Engineers.

After electrical motors are operated for several months it is desirable to purge the bearing chamber of the old lubricant. In the orthodox design of bearing chambers, no provision is made for the escape of old lubricant. When new lubricant is applied to the bearings, it mixes with the old grease. U.S. Motors engineers have devised a new method of lubrication known as Lubriflush, which is a distinct departure from the system that has been in vogue for many years. Through a duct leading from the outside of the motor, new lubricant is injected to the inner side of the bearing with a pressure gun. A drain is placed on the opposite side of the bearing underneath. As new lubricant is injected, the old lubricant is forced out of the bearing and before the new lubricant reaches the drain exit it must first flush the entire bearing and chamber.

The U.S. Lubriflush method of bearing lubrication eliminates the evil results of sludgy, worn-out lubricant. It provides a method of ejecting the old devitalized grease so that the bearing is replenished with clean lubricant throughout its retaining chamber. The grease fitting and drain plug are easily accessible. This method prevents the retention of sludgy substances and residue.

The service operator, in renewing the lubricant, can tell when the operation is completed.

Application of the U.S. Lubriflush system to all U.S. Motors is now being effected. Details of this new departure in lubrication are embodied in a new bulletin just issued by U.S. Electrical Motors, Inc., Dept. 17, 80-34th St., Brooklyn, New York. Copies are available.

Union's New Lubricant Passes Severe Fleet Tests

Union Oil Co. recently announced the introduction of Unacal Truck-Bus Motor Oil, the latest addition to Union Oil's well established line of quality lubricating products, a solvent refined motor oil that answers every requirement of exacting and highly specialized service, Union's experts say.

The initial step in the development of this product was an exhaustive study by company engineers in cooperation with several large Pacific Coast fleet owners, as to just what particular qualities were desired in an ideal heavy duty lubricant—the characteristics an oil must contain to enable it to stand up and function properly under all operating conditions.

The information gained from this preliminary survey was carefully evaluated before the problem was turned over to the research engineers for laboratory experiment and development. Experiments were carried out on all available lubricating oil hydrocarbons to determine the ideal specifications of a truck-bus lubricant. Eventually the combination was found that would satisfy all requirements. In developing this lubricant no specific characteristic has been over-emphasized, but all essential factors have been balanced. Unacal combines stability, low gum, low sludge, and low carbon forming tendencies, with low consumption to make an outstanding lubrication product.

Unacal is thoroughly tested and approved, and has been put through every field and laboratory test that could be devised. It has also been put to service in a number of West Coast motor fleets. These fleets were selected to give the oil a complete testing in every type of service—under all kinds of conditions. Only fleets with low maintenance-cost records were chosen. Yet in spite of this fact, Unacal came through with flying colors. In a 500,000-mile road test, conducted by one of the largest fleet owners in the Northwest, Unacal conclusively proved its merit by materially lowering operating costs. In every test case, operators reported lower maintenance costs than had been previously experienced.

Large scale production of Unacal has been made possible by the recent completion of Union Oil Co.'s new phenol solvent plant at Oleum, Calif. Made by one of the most modern solvent refining processes known today, Unacal is a 100 percent pure paraffin base lubricant, incorporating those specific paraffinic hydrocarbons that are best suited to truck and bus engine lubrication. It is not an all-purpose motor oil, but is a specifically balanced product manufactured and refined to meet the demanding requirements of heavy duty service. Unacal can only be secured in single tripper (53 gallon) drums and is sold direct to fleet owners.

Fusion-Welded Tank Car Is Approved by I. C. C.

The Interstate Commerce Commission has granted application by the American Car and Foundry Co. to construct for use in the transportation of petroleum products ten test cars conforming to current I.C.C. shipping container specification 103 for tank cars, except that tanks will be fabricated by fusion welding instead of riveting.

The newlyweds, accompanied by Mrs. James Ware of Bakersfield, who was a member of the wedding party at Las Vegas, are here shown at Sunday breakfast in the Bakersfield Motel Inn dining room.

Miss Billie Williamson Marries R. M. Holter

Of interest to her many friends in the oil industry is the news of the recent marriage of Miss Billie Williamson to Richard Minor Holter, oil operator, in Las Vegas, Nevada.

Mrs. Holter, who has been the efficient head of the Bakersfield Oil Umpire's office for several years, is now commuting between there and her new home at 840 Westmount Drive, Los Angeles.

The California Oil World wishes much continued happiness for you, Mrs. Holter.

Union Oil Co. Registers Large Debenture Issue

Reese H. Taylor, president of Union Oil Co. of California, has announced that the directors of the company at a recent meeting decided to register with the Securities and Exchange Commission at Washington, D. C., an issue of $30,000,000 3% Debentures, due August 1, 1959. The Registration Statement was filed July 26.

A portion of the proceeds of the new issue is to be applied to the redemption of the company's $10,000,000 Fifteen-Year 3½% Debentures on January 1, 1940, and to the deposit in trust with the trustee for the company's $8,018,500 Twenty-Year 6% Bonds, due May 1, 1942, of an amount sufficient to pay the principal of such bonds, plus interest thereon, to maturity. Upon the redemption and payment of these two issues, the new Debentures will constitute the company's only funded debt. **The company stated in its registration statement that it intends to use the balance of the proceeds for capital expenditures, in accordance with a general program to extend and modernize its production, refining, marine transportation and marketing facilities.**

The new Debentures are to have the benefit of a sinking fund beginning August 1, 1942, in the amount of $1,100,000 annually. Dillon, Read & Co. will head the list of underwriters for the new securities.

W. H. Dunn New Secretary of Raybestos-Manhattan, Inc.

William H. Dunn, comptroller and assistant treasurer of Raybestos-Manhattan, Inc., was elected secretary of the corporation at a meeting of its board of directors in New York on July 19, 1939. He succeeds as secretary the late Morton F. Judd, general manager of The Raybestos Division of Bridgeport and Stratford, Conn., who died recently.

In 1916, Mr. Dunn, who is also a director, became associated with The Manhattan Rubber Mfg. Co. as comptroller. The company merged with The Raybestos Co. of Bridgeport, Conn., and the United States Asbestos Co. of Manheim, Pa., to form Raybestos-Manhattan, Inc., and became The Manhattan Rubber Mfg. Division of that organization. Mr. Dunn is also a director and treasurer of The Manhattan Securities Co. which operates rubber plantations in Java. He was previously one of the staff of the accounting firm of Price, Waterhouse and Co. As secretary, Mr. Dunn will continue to have offices at the Passaic plant.

During the World War Mr. Dunn served in an advisory capacity in the Treasury Department under the Secretaries of the Treasury William G. McAdoo and Carter Glass.

Equipment Nomads Add to Membership

At a meeting of the Los Angeles Chapter of the Nomads held July 19 at the California Country Club, the following new regular members were elected: B. Reinhold, Abegg & Reinhold Co.; R. E. Gignoux, Hopper Machine Works, Inc.; Jack Walton, Emsco Derrick & Equipment Co.; L. George Trembley, Howard Supply Co.; Clarence Morris, Petroleum Engineer; Roy Hitchcock, H & B Sales Co.; George S. MacDonell, California Oil World, and Allen Hicks, Hydril Co. Associate members elected were J. B. Shaw, Grant Oil Tool; Knight Templeton, Security Engineering Co.; Earle Atkins, Chiksan Oil Tool Co., Ltd.

Several visitors were present from foreign oil fields including Trinidad, Ecuador and Venezuela. Entertainment was provided by talks and the showing of moving pictures of South America by Fred Ripley of Emsco and Clarence Wood of Oil Well Equipment Co., both of whom have recently returned from trips in South America. Of particular interest was the display of bows and arrows used by the Motilone Indians in making life miserable for oil company personnel in the Barco possessions of Colombia and the operations along the Venezuelan-Colombian border.

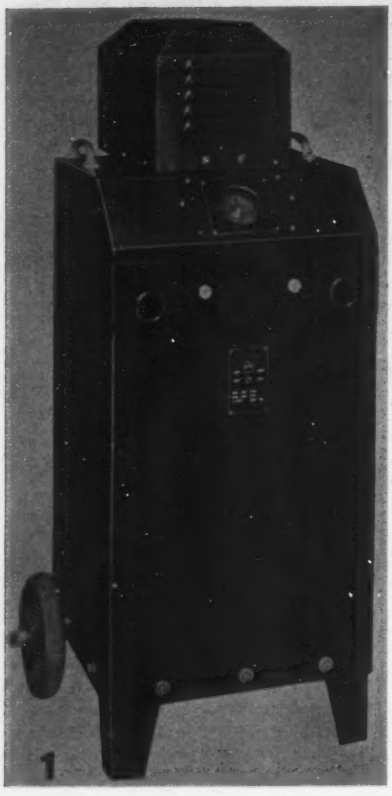
New College Grammar Aid in Business Writing

As a necessary supplement to the library of every business office, The New College Grammar, published by the Ronald Press of New York, is highly recommended. Several commendable features of the book serve adequately to streamline the mechanics of grammar to the tempo of modern business methods.

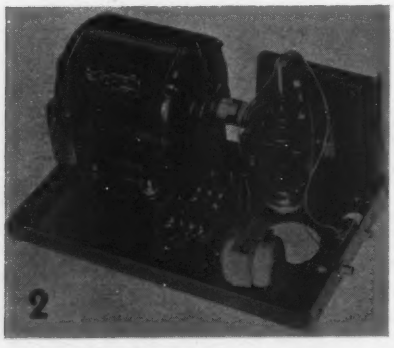
The New College Grammar is a volume of five hundred pages, designed for consistent study as well as quick and ready reference. It will facilitate correct grammatical usage in business and social correspondence and provide a proper enlightenment for the entire office personnel of every business organization. It is priced at $3.00.

New Remote Control Cuts Arc Welding Costs

Something new in the field of arc welding equipment is the recently-announced G-R remote control system. According to engineers of the Glenn-Roberts Co., manufacturers, the remote control system permits current regulation by the operator without breaking the arc and gives the welder constant control of welding heat regardless of the distance between the welding set and actual welding operations.

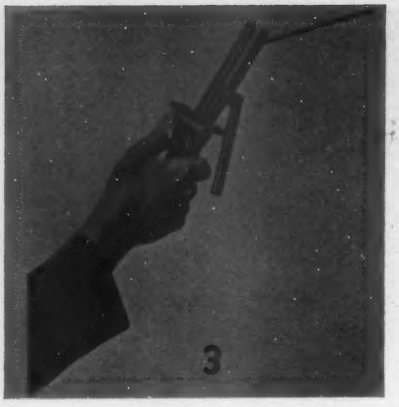


Model 35 with Remote Control relay and drive unit.



Remote control relay, motor and drive assembly (interior).

A compact switch mounted on the welding tongs controls a low-voltage relay circuit carried by an auxiliary cable attached to the welding lead. The relays, mounted in a ventilated enclosure on top of the welding set, control a reversible motor which drives the welding machine's current regulating mechanism through a standard gear reduction unit. A control switch has also been provided at the welding set.



Control switch mounted on welding tongs.

Reports on present remote control installations indicate valuable savings in welding time as well as improved quality of the welding. Operator's efficiency is increased (especially on structural or large-scale fabrication jobs where welding is done at considerable distance from the welding sets) because welding current changes may be made without interrupting work. By giving the operator convenient "finger-tip" control of current, quality of the work improves through the use of exactly the current heat for each type of rod and kind of weld.

At present the new remote control system is available only for G-R transformer-type arc welders which provide full-range, "step-less" current regulation without altering welding characteristics. Seven models are now in production, ranging from a compact shop unit delivering a maximum 125 amperes up to a heavy-duty industrial set with a current range of 50 to 1250 amperes. As the result of several years research, G-R engineers developed a new principle of welding transformer design said to provide improved welding characteristics and high (84 to 96%) efficiency, in addition to infinite current control. The heavy-duty industrial units are designed for either single or multi-circuit manual welding, or for supplying controlled current to automatic welding heads.

Further information is available at the Glenn-Roberts Co. offices, Oakland, Calif.

You are reading the Pacific Coast oil men's home paper.

Prof. Foulk Retained As Nalco Consultant

Professor C. W. Foulk, for years professor of chemistry at Ohio State University and well known in engineering circles both here and abroad for his research and many contributions on foaming and priming of boiler waters, has been retained as consultant on research by the National Aluminate Corp. of Chicago. He will thus continue the work in which he is so interested and which for the past several years has been sponsored by this company.

He remains on the university staff as Professor Emeritus.

Chiksan Names Crane National Distributors

In order to keep pace with the constantly increasing demand for Chiksan Swing Joints, Crane Co. has been appointed national distributors of the Chiksan Line, according to Earle R. Atkins, sales manager, Chiksan Oil Tool Co., Ltd., Fullerton, Calif. In addition to Swing Joints, Crane Co. will also handle barge and dock hose as well as other Chiksan products for industrial use incorporating swing joints.

In making this announcement, Mr. Atkins points out that the Chiksan Oil Tool Co., Ltd., will maintain its staff of sales representatives in principal cities, as in the past, and will continue its sales and service organization in the oil fields to handle all steel rotary hose, circulating heads, disc bits, reamers, mud guns, etc.

The patented design of the Chiksan Swing Joint, employing double rows of steel balls turning in flame-hardened races, affords many exclusive advantages. As a result, states Mr. Atkins, operators in the oil fields as well as in many other lines of industry are rapidly adopting the Chiksan Swing Joint as standard equipment. The nationwide distribution facilities of Crane Co., in addition to Chiksan's own field representatives, assures prompt, intelligent sales service to Chiksan users everywhere.

Nalco Announces Personnel Changes

The National Aluminate Corp. (Industrial Department), Chicago, announces the appointment of Robert Van Grundy to replace J. L. Hickman as service engineer in Texas. Joe E. Davis has been appointed service engineer as an addition to the staff in California.

And apropos of nothing in particular, some men are a lot like cigars—you never can tell whether they are good or bad until they are lit up.

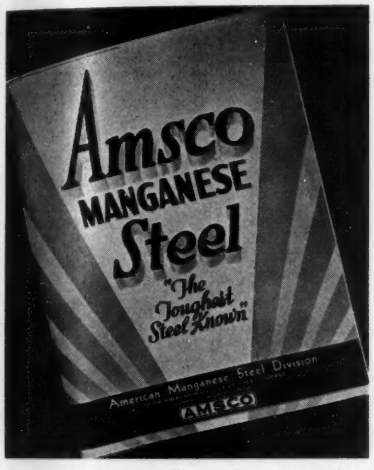
Antimonial Admiralty By Chase Brass & Copper

A new patented alloy, Chase "Antimonial Admiralty" is announced in a booklet just released by Chase Brass & Copper Co., Waterbury, Conn. This alloy was developed especially for oil refinery heat exchanger and condenser tubes, and has the following advantages: 1. Combines the advantages of plain Admiralty and Red Brass. 2. Resists dezincification. 3. Resists sulphur corrosion. 4. Resists intercrystalline corrosion.

Copies of the new booklet describing this alloy may be had by writing to Chase Brass & Copper Co., Waterbury, Conn.

Amsco Manganese Steel Catalogue

The American Manganese Steel Division, Chicago Heights, Ill., has just issued a new 64-page catalogue with over



400 illustrations showing Manganese Steel Castings for every industry using equipment, the parts of which are exposed to impact and abrasion.

An introductory section asks the question, "What is Manganese Steel?"; then proceeds to answer it covering origin, physical properties, why it is the "toughest steel known", and why it so ably resists impact and abrasion.

Information follows on plant and research facilities and method of manufacture, concluding with many pages illustrating uses.

Copies of this catalogue may be had by writing the manufacturer.

The First Inside Mix Gravity Feed Oil Burner

Recently announced is the John Zink Railroad Type Oil Burner, designed to be installed where oil is to be fed to the burner by gravity. This oil burner is the first internal steam mixing burner that has been adapted to gravity feed, the manufacturer says.

This burner can be constructed of any material suitable for its need. It was designed especially for railroad locomotives to replace their present outside mix type burners. Oil is fed into the burner by gravity from the tender. The terrific vacuum caused by the injection of the steam jets not only pulls the oil in by gravity, but actually lifts the oil into the burner.

It is either a flat flame or round flame type and will burn from just a light, or what railroad men call a "spot-fire," up to 20 gallons per minute or 3,000 h.p. without blowing up, bumping, bucking, or pulsating. It makes a continuous sound as it operates. Pulsation has long been a problem in the operation of oil burners on locomotives, as property owners near the right-of-way are constantly complaining about vibration caused by pulsation. This difficulty is overcome with this new burner—it never pulsates at any rating, say the makers.

It not only saves on steam consumption, it is claimed, using from one to two pounds of steam per gallon of fuel oil burner, but tests indicate a saving in fuel oil of approximately one barrel a day, or 5%.

The burner is easy to install and simple to operate. Although designed especially for railroad locomotives it is suitable for all gravity feed oil fired jobs. It is manufactured by John Zink Co., Tulsa, Okla.

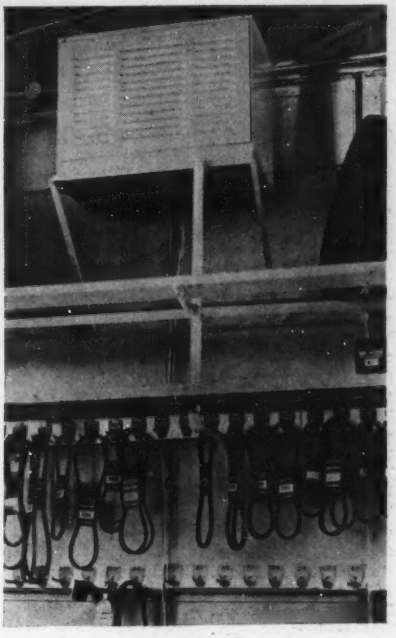
Tide Water Associated Cools Service Stations

Pioneering in air-cooling in service stations, Tide Water Associated Oil Co., Associated Division, has just completed an experimental installation at a station operated by Ted McVey at Merced, Calif.

Motorists driving in the San Joaquin Valley during summer months frequently encounter temperatures above the 100 mark. Unusually favorable reaction from the motoring public has greeted this test installation. Women motorists, particularly those with children, have been quick to voice appreciation of the added comfort afforded by air-cooled restrooms.

The station selected for this unique experiment is of the modern steel construction type.

Cooling equipment chosen was an Atlas 10-P1 Sierra Air Evaporative Cooler, a unit approximately 31 in. long by 18 in. deep and 24 in. high. The unit consists essentially of a pressed steel housing, with a louvered back, which contains an excelsior mat which is kept wet by a small circulating water pump. Air is drawn through this mat by Multivane fans. The experimental unit has two 6 in. Multivane fans, with two openings on the discharge side, so designed that



the openings are spaced on each side of the stud wall between the comfort stations.

Installation of the unit was made in the lift room. Total cost of the experimental installation was less than $100.00.

Oakite Describes Industrial Cleaning

An interesting 48-page illustrated brochure, attractively bound, portraying the important part that production cleaning and its related operations play in America's leading industries, has just been issued by Oakite Products, Inc., New York, in connection with its 30th Year Anniversary.

Among the forty different industries featured is included power, petroleum, railroad, street railway, and bus transportation. It is said this is the first time that the story describing the scope and influence of industrial cleaning in industry has been published in so complete a form. The text matter is concise and contains much statistical and historical data bearing on the contributions made by American industry to the nation's economic progress.

Just by way of a plug for a group of oil workers who go about their business in a quiet, efficient manner and seldom make the headlines, we might mention that since the industry first began to employ night watchmen at tank farms, not a single reservoir has been stolen.

PRODUCTION :-: DEVELOPMENT

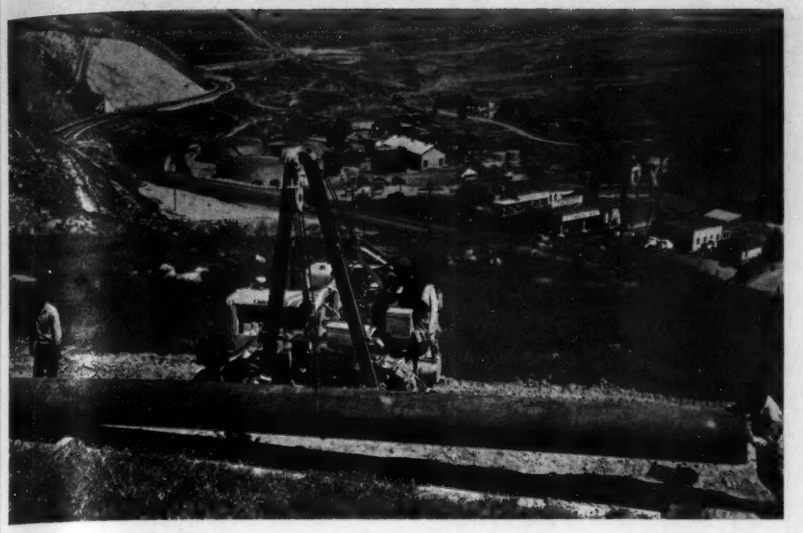
(Figures of Production and Stocks are in barrels of 42 Gals.)

	Total Production June	—DAILY AVERAGE— June, 1939	May, 1939	June, 1938
Group No. 1				
Arvin	28,303	944	673	.....
Belridge—North	361,258	12,042	11,711	12,078
Belridge—South	33,826	1,128	1,115	1,076
Canal	157,015	5,234	4,619	2,255
Canfield Ranch	1,550	52	19	95
Coalinga	404,691	13,490	11,936	10,173
Cole's Levee	20,590	686	406	.....
Edison	68,289	2,276	2,389	2,920
Elk Hills	318,143	10,605	9,862	10,642
Fruitvale	192,174	6,406	6,549	8,852
Greeley	59,413	1,980	1,974	4,140
Kern River	328,505	10,950	10,530	12,170
Kettleman Middle Dome	850	29	31	50
Kettleman North Dome	1,575,402	52,513	53,140	67,652
Lost Hills	94,601	3,153	3,123	3,577
McKittrick	111,458	3,715	3,658	3,031
Midway-Sunset	1,574,592	52,486	53,121	59,270
Mountain View	253,370	8,446	8,161	11,487
Mount Poso	333,907	11,130	12,287	17,369
Rio Bravo	229,126	7,638	7,705	4,319
Round Mountain	255,911	8,530	19,640	14,480
Strand	6,097	203	.....	.....
Ten Section	271,175	9,039	8,928	6,610
Tupman	14,752	492	501	.....
Wasco	33,858	1,129	1,224	391
Wheeler Ridge	9,892	330	328	307
Group No. 2				
Capitan	72,473	2,416	2,426	2,853
Elwood	114,722	3,824	4,258	6,667
Rincon	112,009	3,733	3,520	4,043
San Miguelito	73,929	2,464	2,525	2,515
Santa Barbara	8,908	297	300	422
Santa Maria	593,137	19,771	16,116	15,491
Summerland	783	26	42	37
Ventura Avenue	1,162,620	38,754	35,116	35,432
Ventura-Newhall	185,877	6,196	5,757	4,871
Watsonville	900	30	30	40
Group No. 3				
Brea-Olinda	173,133	5,771	5,465	5,691
Coyote—East	76,211	2,540	2,232	3,515
Coyote—West	281,332	9,378	7,511	8,744
Domingues	539,367	17,979	21,457	26,688
El Segundo	95,628	3,187	3,293	9,751
Huntington Beach	794,722	26,491	29,739	32,374
Inglewood	381,763	12,725	11,791	14,736
Lawndale	980	33	61	79
Long Beach	1,372,290	45,743	48,311	58,543
Los Angeles-Salt Lake	14,466	482	506	577
Montebello	602,042	20,068	17,497	11,037
Playa Del Rey	153,811	5,127	4,939	6,312
Potrero	33,924	1,131	1,063	852
Richfield	269,097	8,970	8,604	9,238
Rosecrans	345,217	11,507	12,817	7,986
Santa Fe Springs	825,264	27,509	27,425	33,731
Seal Beach	210,744	7,025	7,338	8,906
Torrance	542,801	18,093	19,618	14,180
Whittier	29,092	970	1,016	938
Wilmington	2,415,298	80,510	89,886	93,150
Total	18,221,295	607,376	615,289	672,343
May	19,073,972	615,289		
Decrease	852,677	7,913		

SUMMARY OF CALIFORNIA OILFIELD OPERATIONS FOR JUNE 1939—STOCKS HELD IN PACIFIC COAST TERRITORY BY CALIFORNIA OIL COMPANIES

	June 30, 1939	May 31, 1939	June Changes	Dec. 31, 1938 (Reclassified)
1. Gasoline-Bearing Crude	38,806,186	39,830,694	−1,024,508	36,225,312
2. Non-Gasoline-Bearing Crude	14,206,766	14,442,707	− 235,941	16,282,177
3. Unblended Nat. Gas	2,396,219	2,423,266	− 27,047	2,699,455
4. Gasoline (not including distributing and service stations)	14,129,499	15,044,669	− 915,170	13,259,369
5. Naphtha Distillates	1,574,502[1]	1,339,712[1]	+ 234,791	1,566,349[1]
6. Gas oil and Diesel Oil	10,333,510	10,244,405	+ 89,105	10,539,937
7. Fuel Oil Residuum	70,841,319	71,091,951	− 250,632	70,957,881
8. All Other Stocks	7,179,119[2]	6,933,820[2]	+ 238,299	6,153,809[2]
TOTAL	159,460,121	161,351,224	−1,891,103	157,684,289
[1]Estimated amount of unfinished gasoline contained in 5	1,310,625	1,159,101	.....	1,350,379

	New Rigs Up	Active Drilling	Producers Completed	Daily Initial Output	Active Producing	Abandoned Wells Drillers	Abandoned Wells Producers
Group No. 1							
Arvin	2	4	1	1,740	5	....	....
Belridge—North	..	4	....	....	66	....	....
Belridge—South	..	....	....	....	86	....	....
Canal	2	2	1	2,832	23	....	....
Canfield Ranch	..	....	....	....	1	....	....
Coalinga	3	12	3	6,024	822	....	2
Cole's Levee	1	4	1	695	4	....	....
Edison	2	1	....	....	88	....	....
Elk Hills	1	1	1	147	169	....	....
Fruitvale	..	2	1	70	173	....	1
Greeley	..	4	....	....	17	....	....
Kern River	1	4	1	20	1,342	....	....
Kettleman Middle Dome	..	....	....	....	3	....	....
Kettleman North Dome	3	14	2	4,019	223	....	....
Lost Hills	..	1	....	....	245	....	....
McKittrick	..	....	....	....	191	....	....
Midway-Sunset	2	6	....	....	2,537	....	2
Mountain View	..	....	....	....	177	....	....
Mount Poso	..	....	1	25	282	....	....
Rio Bravo	..	2	2	2,207	31	....	....
Round Mountain	1	2	1	13	206	....	....
Strand	..	....	1	1,552	1	....	....
Ten Section	..	1	1	1,573	32	....	....
Tupman	..	1	....	....	2	....	....
Wasco	..	1	....	....	6	....	....
Wheeler Ridge	..	....	....	....	33	....	....
Group No. 2							
Capitan	..	....	....	....	45	1	....
Elwood	..	....	....	....	81	1	....
Rincon	..	1	....	....	52	....	1
San Miguelito	2	2	....	....	20	....	....
Santa Barbara	1	....	1	94	27	....	1
Santa Maria	..	2	2	2,222	301	4	....
Summerland	..	....	....	....	19	1	....
Ventura Avenue	6	9	3	5,361	282	....	....
Ventura-Newhall	1	7	1	25	549	6	....
Watsonville	..	....	....	....	7	....	....
Group No. 3							
Brea-Olinda	..	....	....	....	354	1	....
Coyote—East	..	....	....	....	78	....	....
Coyote—West	..	1	....	....	47	....	....
Domingues	3	2	1	1,350	188	....	....
El Segundo	..	....	....	....	50	....	1
Huntington Beach	3	6	2	1,116	543	....	1
Inglewood	..	....	....	....	209	....	1
Lawndale	..	....	....	....	6	....	....
Long Beach	2	3	....	....	1,223	....	....
Los Angeles-Salt Lake	..	....	....	....	111	....	1
Montebello	19	23	4	5,763	240	2	1
Playa Del Rey	..	....	1	90	177	....	4
Potrero	..	....	....	....	14	....	1
Richfield	..	2	....	....	297	1	1
Rosecrans	1	6	2	156	132	....	2
Santa Fe Springs	..	....	....	....	573	....	4
Seal Beach	..	....	....	....	101	....	1
Torrance	3	2	4	816	722	1	4
Whittier	..	....	....	....	143	1	....
Wilmington	19	20	19	8,708	660	....	1
Miscellaneous Drilling	11	35	....	....	....	4	....
Group No. 4—Gas Fields							
Buena Vista	..	....	....	....	....	....	....
Buttonwillow	..	....	....	....	....	....	....
Chowchilla	..	....	....	....	....	....	....
Delano	4	2	2	Gas	1	....	....
Dudley Ridge	..	....	....	....	....	....	....
Goleta	..	1	....	....	....	....	....
Marysville Buttes	..	1	....	....	2	....	....
McDonald Island	..	....	....	....	4	....	....
Rio Vista	..	....	....	....	20	....	....
Semi-Tropic	..	....	....	....	....	....	....
Tracy	..	....	....	....	1	....	....
June	93	191	59	46,736	14,044	23	33
May	70	168	60	82,444	13,928	19	25
Increase (*Decrease)	23	23	1*	35,708*	116	4	8



"Caterpillar" R-4 Tractor with Cardwell Side Boom, laying 22-in. gas line which runs as the main from Grapevine to Newhall, then breaks up into feeds for Los Angeles.

Socony Executive Lauds California

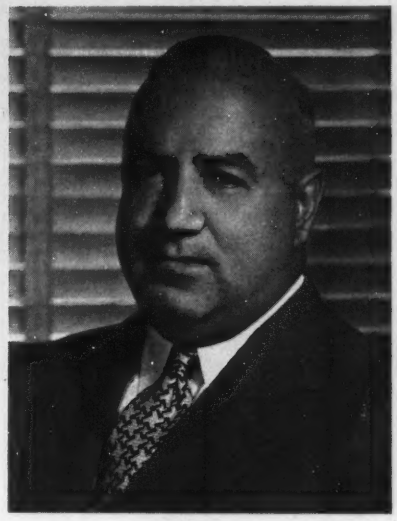
"We who come to California from New York are always amazed at the extent and constantly active development of your oil industry, producing one of every five barrels of oil obtained in America, greatest oil country of the world."

This was the statement of John Briggs, marketing executive of Socony-Vacuum Oil Co., Inc., who was among prominent visitors in Los Angeles recently. He was accompanied by George Palmer of the same company, manager of engine builders activities.

While here the oil executives were in conference with officials of General Petroleum Corp., one of the Socony-Vacuum companies upon which the parent company depends for a large volume of petroleum production, refining and shipping.

"Yes, California always amazes me," Mr. Briggs said. He has recently completed a tour embracing Central American countries, the Provinces of Canada and the Pacific Coast states in the interests of his company, the operations of which extend to every section of the globe.

"Perhaps, because folks do not take full cognizance of the industries within their own borders, it may be news, even



John Briggs

to many who reside in California, that this state and Texas are among the largest producers of the 21 oil states of the nation, and that California's 'black gold' represents 20 percent of the production in America. California is also unique in that it stands alone and apart from any other oil sections. Ocean-going ships, including our Socony-Vacuum tankers, transport California petroleum products throughout the world.

"One interesting and impressive fact I have uncovered is that California, which first came into greatness through discovery of gold, still mines the yellow metal in the value of about forty-five millions of dollars annually. And yet, the gold mined here represents but one-fifth the value of your oil production, estimated last year at almost 250 million barrels, valued at approximately a dollar a barrel. From this oil about 2,500 products are now made.

"California, therefore, produces, refines and ships a very heavy volume of the substances that lubricate and speed the affairs of the world. In our big marketing centers, such as New York, Chicago, Detroit and other cities noted for automobile registration and industrial activity, there is no oil production. Yet, here in California, the production and refining of oil products go hand-in-hand with consumption. Our affiliate, General Petroleum Corp., in addition to its extensive marketing of branded products throughout the Pacific Coast area, is also a large supplier to many east coast and foreign markets.

"Now About That $100, Professor . . . " Kay Kyser, professor of the "College of Musical Knowledge" ponders over the problem of tax figures on gasoline at the Petroleum Exhibit at the Golden Gate International Exposition. Lovely "Ginny" Simms, songstress with Kay Kyser's band, seeks the winning answer for one of the cash prizes in the monthly Treasure Well contest, a feature popular with visitors to the Petroleum display in the Vacationland Building at the World's Fair.

Business and Professional Directory

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Reconditioned or new heat exchangers, stills, fractionators, absorbers, condensers, at cut prices. Plants designed any size for any use. W. F. Pyne, 909 Ardmore Ave., Los Angeles. DRexel 1412. tf

MAPS

New colored San Joaquin Valley map, showing oil & gas fields, also all wildcat wells, both old & new, with status June, 1939. Three-foot size, paper $7.50, cloth $9.00. 4½-foot size, $15.00. Earl M. Price & Co., Box 533, Bakersfield. 8-5-d

MAPS

Large maps of Los Angeles Basin oil fields and map showing all California oil fields. Price $15.00 each on paper and $20 each on cloth. Individual state oil and gas maps of Mid-Continent and Rocky Mountain regions. Maps show geological cross sections at base. These maps indicate wells drilling, wells producing and abandoned, with depths.
All maps revised up to date of purchase.
JAMES C. BRANSFORD
1127 Story Bldg.
Los Angeles, Calif.
Phone: TUcker 7530

Oil Men's Calendar

C.N.G.A. Meeting First Thurs. Each Month.

October

4-6—American Institute of Mining & Metallurgical Engineers, Petroleum Division, Galveston, Tex.

9-10—American Gas Assn., Annual Convention, New York.

16-20—National Safety Congress and Exposition, Chalfont-Haddon Hall, Atlantic City.

Week of 16—40th Annual National Automobile Show, Grand Central Palace, New York.

Week of 16—National Tax Conference, Palace Hotel, San Francisco, Calif.

19-20—American Institute of Mining & Mettallurgical Engineers, Petroleum Division, Los Angeles, Calif.

November

8-16—National Motor Truck Show, Navy Pier, Chicago, Ill.

13-17—American Petroleum Institute, 20th Annual Meeting, Stevens Hotel, Chicago.

Oil producers are planning new wells to be drilled to five-mile depths.

California Crude Oil Production

Two Weeks Ended July 29, 1939

	July Daily Quota	Average Daily Production	Excess
San Joaquin Valley			
Belridge—North	13,298	12,285	*1,013
Belridge—South	2,172	1,173	*999
Buena Vista	17,399	13,862	*3,537
Canal	5,519	5,757	238
Coalinga-East (Eocene)	7,000	6,469	*531
Coalinga—East-West	16,294	12,598	*3,696
Edison	2,177	1,976	*201
Elk Hills	7,879	10,680	2,801
Fruitvale	6,190	5,593	*597
Greeley	2,774	2,035	*739
Kern Front	7,599	6,897	*702
Kern River	8,447	3,119	*5,328
Kettleman No. Dome	35,411	52,775	17,364
Lost Hills	4,157	3,145	*1,012
McKittrick	3,953	3,671	*282
Midway	38,124	37,931	*193
Mount Poso	10,625	9,795	*830
Mountain View	9,075	9,573	498
Rio Bravo	7,750	7,875	125
Round Mt. and Coffee Canyon	8,192	8,415	223
Ten Section	9,308	9,431	123
Wasco	1,255	1,281	26
Other Fields	3,632	3,720	88
TOTAL	228,230	230,056	1,826
Coastal Counties			
Elwood	3,765	3,899	134
Rincon	2,466	2,143	*323
Santa Maria	8,529	3,166	*5,363
Gato Ridge	2,565	2,858	293
Santa Maria Valley	21,406	13,059	*8,347
Santa Paula-Newhall	5,649	6,079	430
Ventura Avenue	30,701	36,214	5,513
Other Fields	5,365	4,947	*418
TOTAL	80,466	72,365	*8,081
Los Angeles Basin			
Alamitos-Seal Beach	6,750	6,692	*58
Brea-Olinda	8,352	5,717	*2,635
Coyote—East	3,104	2,490	*614
Coyote—West	10,350	10,167	*183
Dominguez	16,204	17,742	1,538
El Segundo	3,198	3,013	*185
Huntington Beach—New and Old	22,995	25,993	2,998
Inglewood	12,685	13,045	360
Long Beach	41,587	45,465	3,878
Montebello	6,075	6,208	133
Montebello-West End	9,031	11,954	2,923
Playa del Rey	4,763	5,086	323
Richfield	7,711	8,077	366
Rosecrans-Athens	9,459	10,663	1,204
Santa Fe Springs	25,755	27,130	1,375
Torrance	5,561	5,286	*275
Torrance "34" and "D & B"	10,927	12,780	1,853
Wilmington	78,772	85,107	6,335
Other Fields	3,320	3,703	383
TOTAL	286,599	306,318	19,719
STATE TOTAL	595,275	608,739	13,464

*—Shortage.

Fred E. Cole No. 19 Is Lone Valley Driller

Only well now drilling in the Santa Maria Valley is Fred E. Cole's well No. 19, now making hole below 3748 ft. The well is in proved territory adjoining Union Oil Co.'s prolific Frank Vicente lease in the southwesterly portion of the field.